

## CHILD-BIRTH, ABORTION, PUERPERAL SEPTICÆMIA, AND STILL-BIRTH.

The total number of deaths of women reported as due to child-birth in the Census of 1880 was 5,646, being 746 of each 100,000 deaths from all causes. The proportion was 895 per 100,000 in the Census of 1870, 1,032 for 1860, and 965 for 1850. The number of deaths reported as due to abortion was 721, being 95 out of each 100,000 deaths from all causes. The proportion of deaths reported as due to child-birth and abortion is decidedly greater in the rural districts than in the large cities, in the colored than in the white population, and in those of German rather than in those of Irish parentage. In the aggregate of the 50 large cities, child-birth is reported as causing 4.7 per 1000 deaths from known causes, while in the remainder of the country it is reported as causing 19.5 per 1000 deaths from known causes. Abortion is reported as causing 1.2 per 1000 of all deaths from known causes in the 50 large cities, and 2.3 per 1000 in the rural districts. While the mortality from this cause is decidedly greater in the country than in large cities, the difference is not quite so great as these figures would indicate. A better standard of comparison is between the number of deaths reported as due to child-birth and abortion, respectively, and the number of women living between the ages of 15 and 50 years.

Making this comparison, we find that in the large cities the proportion of deaths from child-birth per 100,000 women between the ages of 15 and 50 is 16.21, while in the rural districts it is 51.58. For abortion the corresponding figures are, for the cities 4.16 and for the rural districts 6.10. This difference in the mortality connected with child-birth in the cities, as compared with that in the country, corresponds to what is found in other countries. For example, taking the report of the registrar-general of England for 1876, we find that, among the mothers of every 1000 children born alive in London, 4.6 die, this figure rising to 6 and upward in some of the rural districts and 8.8 in north Wales.

TABLE 55.—SHOWING FOR THE UNITED STATES, FOR THE LARGE CITIES AND THE RURAL POPULATION, AND FOR 10 GRAND GROUPS WITH DISTINCTION OF COLOR, THE NUMBER OF BIRTHS, THE DEATHS FROM CHILD-BIRTH, AND THE PROPORTION OF DEATHS FROM CHILD-BIRTH TO 1000 BIRTHS.

	Total births.	Deaths from child-birth.	Deaths from child-birth per 1000 births.
The United States .....	1,577,173	5,046	3.57
Rural .....	1,398,561	5,283	3.91
Cities .....	228,612	363	1.58
White in 10 Grand Groups .....	723,884	2,225	3.07
Colored in 10 Grand Groups .....	240,607	1,217	5.05

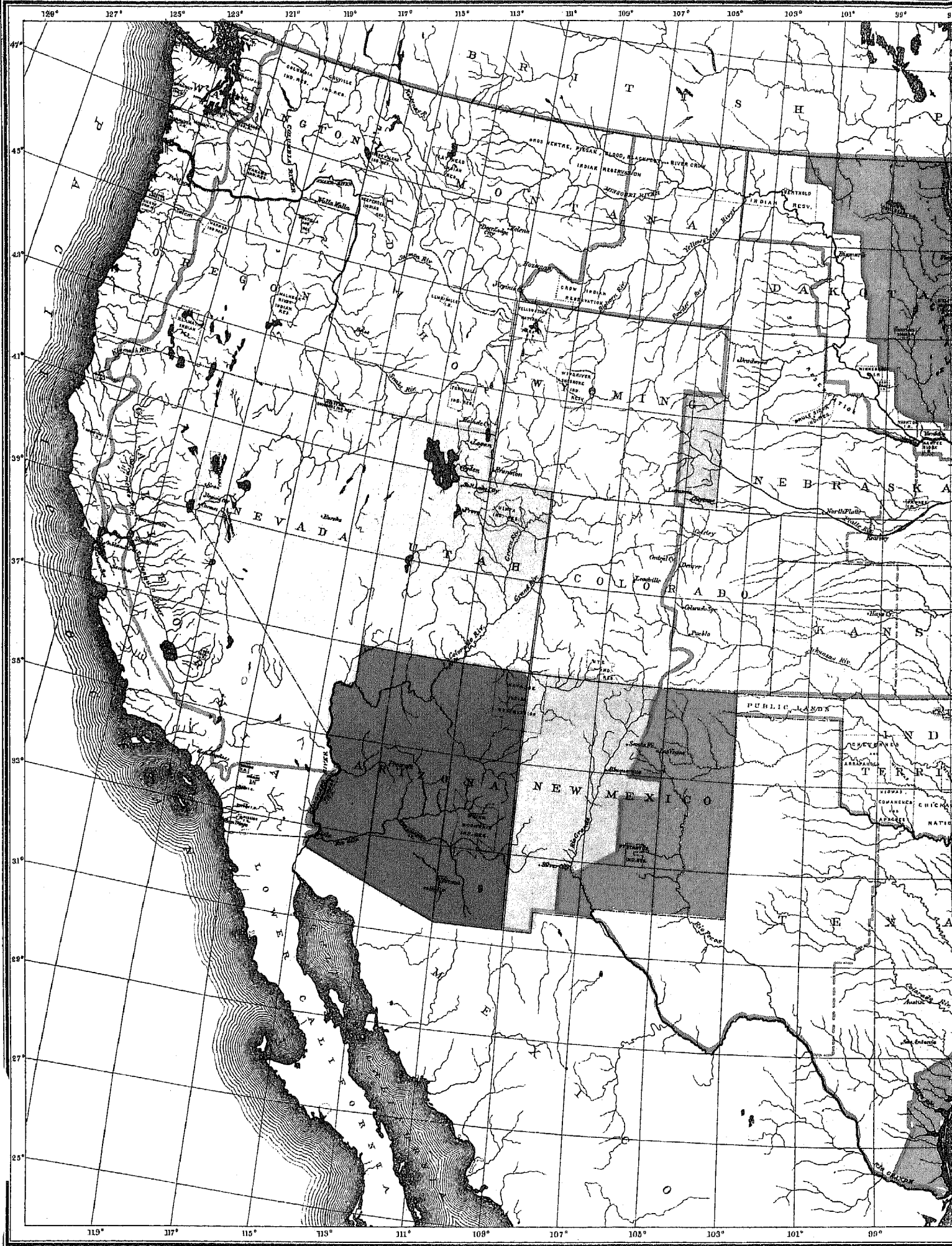
This is a low death rate in relation to births, though not so low as is reported by the registrar-general of England for 1880, viz, 2.07 per 1000.

The normal death rate per 1000 births is given by Dr. Duncan as 8.3; others put it as low as 6.2.

The following table, in connection with Map No. 17, indicates the relative frequency in different parts of the country of the deaths reported as due to child-birth and abortion:

TABLE 56.—SHOWING FOR THE UNITED STATES AND FOR GRAND GROUPS, WITH DISTINCTION OF RURAL AND CITIES, THE PROPORTION PER 100,000 DEATHS FROM CHILD-BIRTH AND ABORTION TO FEMALE POPULATION BETWEEN THE AGES OF 15 AND 50.

Grand Groups.	UNITED STATES.		RURAL.		CITIES.	
	Child-birth.	Abortion.	Child-birth.	Abortion.	Child-birth.	Abortion.
Total .....	45.19	5.75	51.58	6.10	10.21	4.16
1. North Atlantic Coast region .....	24.86	2.55	26.47	2.17	21.45	3.86
2. Middle Atlantic Coast region .....	30.22	5.81	48.48	3.35	19.42	7.26
3. South Atlantic Coast region .....	91.90	5.21	98.95	5.10	.....	0.64
4. Gulf Coast region .....	67.57	5.40	87.56	6.61	4.79	1.59
5. Northeastern Hills and Plateaus .....	35.69	4.17	36.52	4.22	24.17	3.45
6. Central Appalachian region .....	32.86	3.47	33.48	3.45	19.46	3.89
7. Region of the Great Northern Lakes .....	39.73	5.06	53.64	6.06	20.64	3.69
8. The Interior Plateau .....	35.70	2.62	44.82	3.32	11.17	0.74
9. Southern Central Appalachian region .....	40.94	6.16	40.94	6.46	.....	.....
10. The Ohio River Belt .....	27.05	4.59	32.16	5.29	5.89	1.68
11. Southern Interior Plateau .....	71.38	7.29	71.38	7.29	.....	.....
12. South Mississippi River Belt .....	104.37	12.66	104.37	12.66	.....	.....
13. North Mississippi River Belt .....	44.25	4.75	54.90	5.76	11.73	1.67
14. Southwest Central region .....	82.69	15.28	82.69	15.28	.....	.....
15. Central region, plains and prairies .....	37.79	6.25	39.20	6.45	8.10	2.02
16. The Prairie region .....	47.22	5.31	47.22	5.31	.....	.....
17. Missouri River Belt .....	47.81	11.43	49.33	10.05	28.52	21.39
18. Region of the Western Plains .....	83.13	14.58	83.09	15.05	11.80	11.30
19. Heavily-timbered region of the Northwest .....	49.75	8.10	49.75	8.10	.....	.....
20. Cordilleran region .....	89.23	6.86	89.23	6.86	.....	.....
21. Pacific Coast region .....	34.29	2.49	51.88	2.16	10.31	2.94





**MAP OF THE  
UNITED STATES**

SHOWING THE  
DISTRIBUTION OF DEATHS

FROM  
**CHILD-BIRTH**

AS COMPARED WITH TOTAL DEATHS  
FROM KNOWN CAUSES.

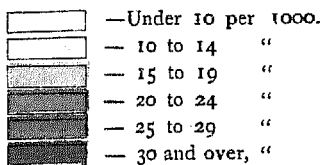


FIG. 66.—DEATHS FROM CHILD-BIRTH IN 21 GRAND GROUPS, PER 100,000 DEATHS FROM KNOWN CAUSES, OF FEMALES BETWEEN 15 AND 50 YEARS OF AGE, WITH DISTINCTION OF RURAL AND CITIES.

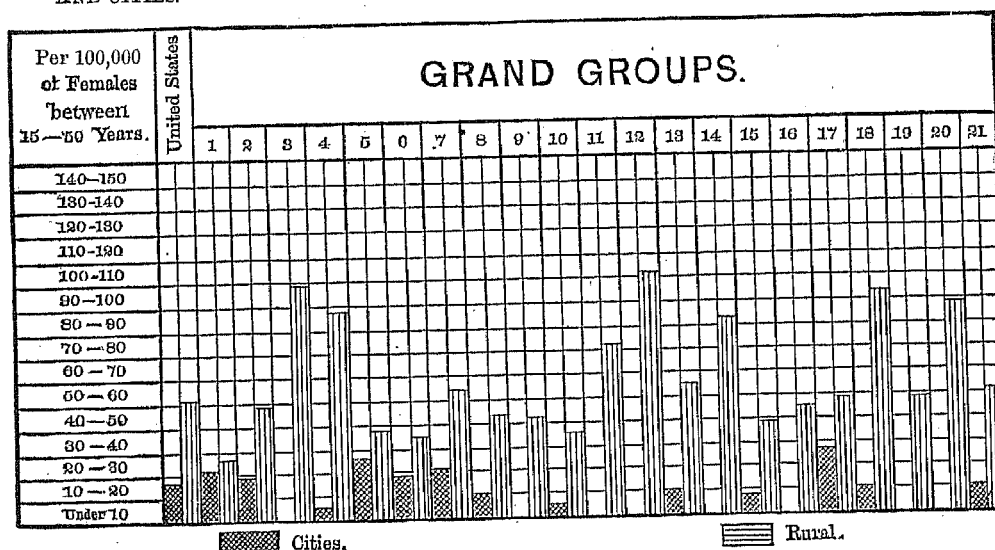
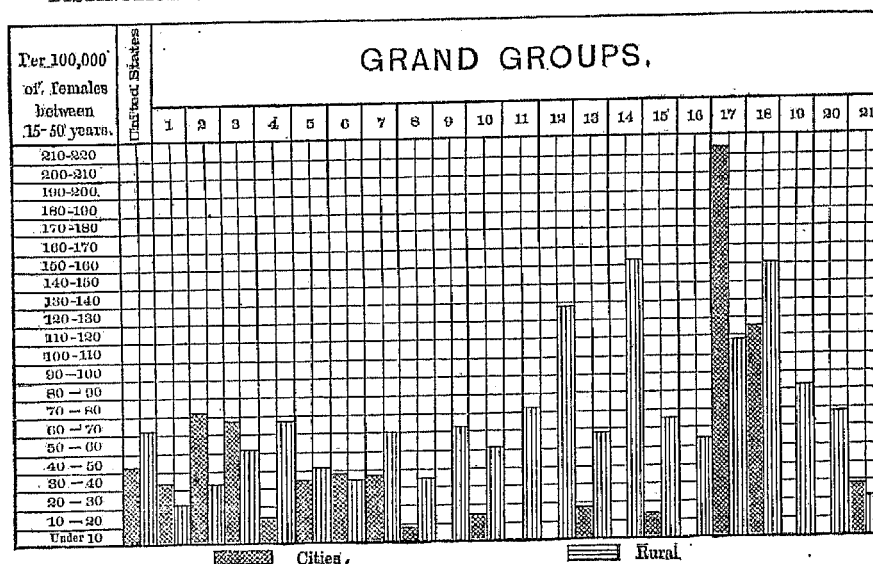


FIG. 67.—DEATHS FROM ABORTION IN 21 GRAND GROUPS, PER 100,000 DEATHS FROM KNOWN CAUSES, OF FEMALES BETWEEN 15 AND 50 YEARS OF AGE, WITH DISTINCTION OF RURAL AND CITIES.



The following table shows by grand groups the proportion of deaths from child-birth and from abortion per 1000 deaths from known causes, with distinction of rural and cities, and, for certain grand groups, of white and colored, and of Irish and German parentage. It will be seen from this table that the mortality in child-birth is about twice as great in relation to the deaths from known causes as it is in the white, and that it is markedly greater in those of German than it is in those of Irish parentage. The same rule holds good as regards abortion, although the difference is less marked. A large proportion of the deaths due to criminal abortion are reported as deaths from peritonitis, which is the cause in part of the excess of deaths in females reported as due to that cause.

## MORTALITY AND VITAL STATISTICS.

TABLE 70.—SHOWING FOR RURAL AND CITIES, FOR WHITE AND COLORED FEMALES, AND FOR FEMALES OF IRISH AND GERMAN PARENTAGE, THE PROPORTION OF DEATHS FROM CHILD-BIRTH AND ABORTION IN 1000 DEATHS OF FEMALES FROM KNOWN CAUSES.

Grand Groups.	RURAL.		CITIES.		WHITE.		COLORED.		IRISH PARENTAGE.		GERMAN PARENTAGE.	
	Child-birth.	Abortion.	Child-birth.	Abortion.	Child-birth.	Abortion.	Child-birth.	Abortion.	Child-birth.	Abortion.	Child-birth.	Abortion.
Total .....	10.5	2.3	4.7	1.2	13.9	0.9	24.8	1.4	14.1	0.5	18.3	0.8
1. North Atlantic Coast region.....	0.3	0.7	6.3	1.0								
2. Middle Atlantic Coast region.....	17.3	1.2	4.9	1.8	7.3	0.7	17.8	1.0	12.4	0.3	11.2	1.5
3. South Atlantic Coast region.....	32.4	1.8	1.1		24.5	0.9	32.9	0.7	7.2	0.6	6.4	1.1
4. Gulf Coast region.....	37.3	3.0	1.2	0.4	25.5	1.0	23.5	0.8				
5. Northeastern Hills and Plateaus .....	12.6	1.5	8.5	1.2								
6. Central Appalachian region .....	13.1	1.3	6.7	1.3					10.1	0.3	10.2	
7. Region of the Great Northern Lakes .....	23.6	2.7	6.7	1.2					21.7	0.6	15.1	
8. The Interior Plateau .....	17.2	1.2	3.5	0.2					26.5	1.5	27.6	1.0
9. Southern Central Appalachian region .....	15.7	2.3			11.1	0.3	22.6	1.0	17.6	0.4	17.0	0.4
10. The Ohio River Belt.....	12.0	2.0	1.7	0.5	10.5	1.1	13.0	1.3				
11. Southern Interior Plateau.....	25.9	2.7			10.0	0.7	12.0	1.3	0.8		10.7	0.4
12. South Mississippi River Belt.....	36.1	4.2			21.3	1.1	29.3	1.5				
13. North Mississippi River Belt.....	20.8	2.2	3.9	0.5	33.3	1.4	37.9	2.3				
14. Southwest Central region .....	26.5	4.8							36.3	0.8	16.7	0.5
15. Central region, plains and prairies .....	14.4	2.4	2.8	0.7	24.6	2.2	34.1	2.8				
16. The Prairie region.....	18.8	2.0			13.9	1.1	13.6	1.4				
17. Missouri River Belt.....	16.5	3.4	14.7	11.0					19.9	0.5	30.6	0.8
18. Region of the Western Plains.....	33.5	5.7	5.5	5.5					29.0	2.5	21.8	0.8
19. Heavily-timbered region of the Northwest .....	19.6	3.2							100.0		75.7	
20. Cordilleran region .....	37.0	2.7							28.1	1.9	52.2	1.0
21. Pacific Coast region .....	29.8	1.7	3.7	1.0					33.1		13.3	3.5
									33.7		15.4	

From these tables and from Map No. 17 it will be seen that the greatest mortality from child-birth occurred in the southern portion of the United States, in the northern parts of Wisconsin and Minnesota, and in eastern Dakota. It was also comparatively high in the lower Mississippi valley.

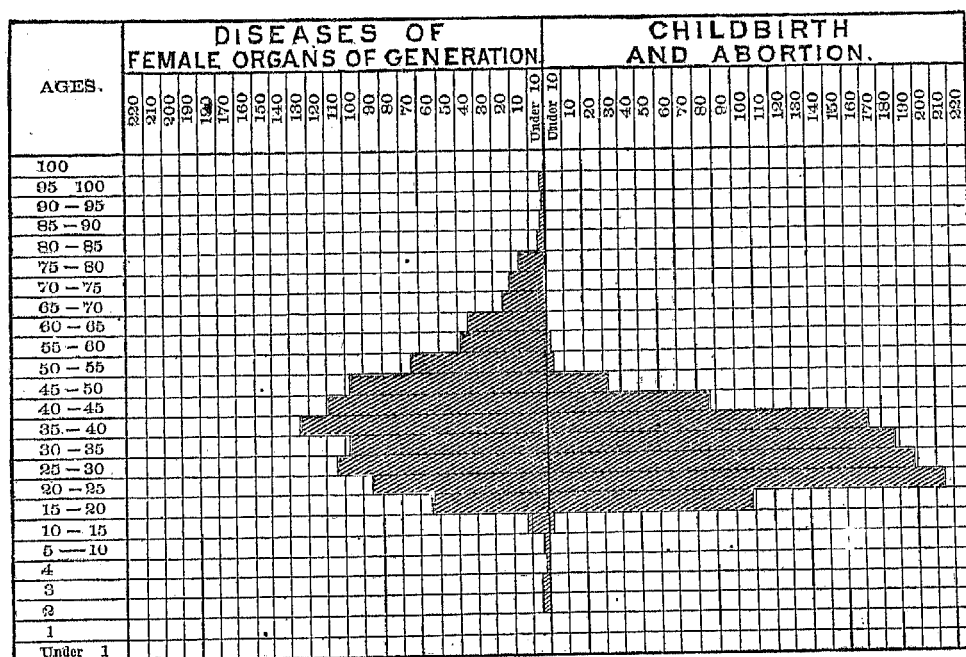
The following table and diagram show the distribution of deaths from child-birth and abortion in relation to age, the diagram showing also the relations to age of the deaths reported as due to diseases of the female organs of generation. The highest proportion of deaths from child-birth occurs at the ages of 20 to 25 years:

TABLE 71.—SHOWING THE NUMBER OF DEATHS FROM CHILD-BIRTH AND ABORTION AT EACH GROUP OF AGES IN 1000 DEATHS REPORTED AS DUE TO THESE CAUSES.

Ages.	Child-birth.	Abortion.	Ages.	Child-birth.	Abortion.	Ages.	Child-birth.	Abortion.
Under 1 year .....			15-20 years .....	109.33	108.79	60-65 years .....	0.36	
1 year .....			20-25 years .....	219.37	175.73	65-70 years .....		
2 years .....			25-30 years .....	195.65	220.36	70-75 years .....		
3 years .....			30-35 years .....	185.48	211.99	75-80 years .....		
4 years .....			35-40 years .....	170.86	173.53	80-85 years .....		
Total under 5 years .....			40-45 years .....	90.24	83.68	85-90 years .....		
5-10 years .....			45-50 years .....	23.19	15.34	90-95 years .....		
10-15 years .....	2.85		50-55 years .....	2.14	2.79	95 and over .....		
			55-60 years .....	0.54	1.89	Unknown.....	6.98	5.58

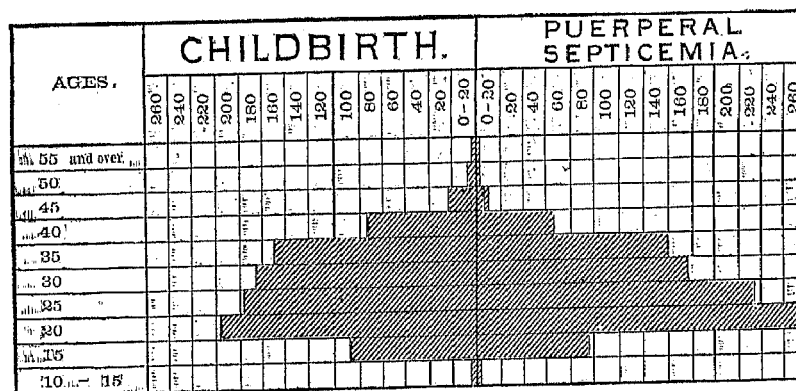


FIG. 68.—DEATHS FROM DISEASES OF FEMALE ORGANS OF GENERATION AND FROM CHILD-BIRTH AND ABORTION AT CERTAIN GROUPS OF AGES IN 1000 DEATHS DUE TO THESE CAUSES.



As a rule, the deaths reported as due to child-birth are those which occur during or soon after labor; those which occur later are more often reported as due to puerperal septicæmia. The age relations of these two causes are similar, as will be seen by the following diagram:

FIG. 69.—DEATHS FROM CHILD-BIRTH AND PUERPERAL SEPTICEMIA AT CERTAIN GROUPS OF AGES IN 1000 DEATHS REPORTED AS DUE TO THESE CAUSES.



The much greater apparent mortality from child-birth in the rural districts as compared with that in the large cities is due to several causes, one of which is that, in the cities with a registration of deaths upon physicians' certificates, the cause of death is less apt to be returned under the vague term of "child-birth" than it is in the country where the cause of death is given by non-professional persons.

The chief cause, however, is probably that in the cities cases of labor receive more prompt and more efficient professional care than they do in the country. In the rural districts a very considerable number of labor cases are attended only by old women and more or less ignorant midwives, and in cases of difficult labor instrumental aid is often delayed until it is too late. The proportion of deaths reported as due to puerperal septicæmia is also less in the large cities than in the rest of the country, being in the former 9.7 and in the latter 12.8 per 1000 deaths from all specified causes. The proportion of deaths from this cause is greatest in women of German parentage, in which it is 15.7. For women of Irish parentage it is 12.5, and in those parts of the country where the distinction of color is made, it is for whites, 12.6, and for the colored, 10.2 per 1000 of specified causes of death. The following table shows the proportion of deaths from this cause in the several grand groups:

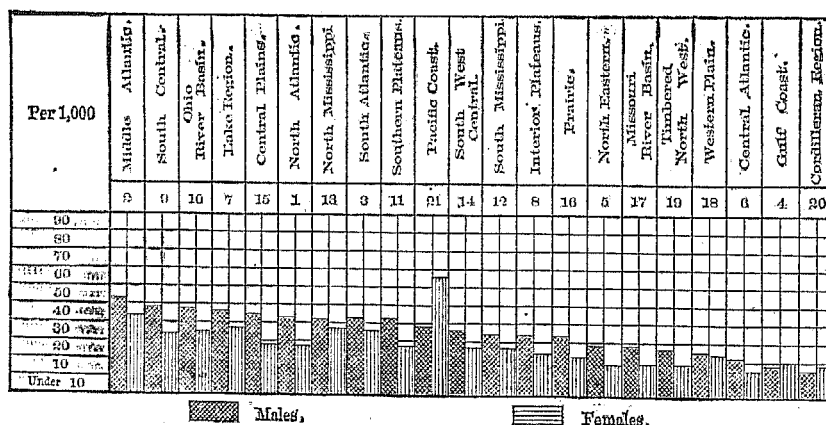
TABLE 72.—SHOWING FOR RURAL AND CITIES, FOR WHITE AND COLORED FEMALES, AND FOR FEMALES OF IRISH AND GERMAN PARENTAGE, THE PROPORTION OF DEATHS FROM PUERPERAL SEPTICÆMIA IN 1000 DEATHS FROM KNOWN CAUSES.

Grand Groups.	Rural.	Cities.	White.	Colored.	Irish parentage.	German parentage.
Total.....	12.80	9.70	12.6	10.2	12.5	15.7
1. North Atlantic Coast region .....	6.13	7.35			7.9	11.2
2. Middle Atlantic Coast region .....	6.93	11.38	10.7	5.1	17.0	13.5
3. South Atlantic Coast region .....	9.53	6.71	12.8	7.2		
4. Gulf Coast region .....	11.29	6.00	12.2	6.1		
5. Northeastern Hills and Plateaus.....	6.99	9.73			10.1	
6. Central Appalachian region.....	9.52	6.73			13.5	3.3
7. Region of the Great Northern Lakes.....	11.07	13.93			11.1	21.9
8. The Interior Plateau.....	6.45	5.91	6.4	5.5	8.5	4.7
9. Southern Central Appalachian region.....	12.43		12.9	10.7		
10. The Ohio River Belt .....	14.33	8.24	13.3	7.3	8.4	13.8
11. Southern Interior Plateau.....	16.72		20.0	14.2		
12. South Mississippi River Belt .....	14.20		19.2	10.9		
13. North Mississippi River Belt .....	18.28	7.96			14.1	18.0
14. Southwest Central region .....	22.96		23.6	17.4		
15. Central region, plains and prairies .....	12.87	10.69	13.7	10.0		
16. The Prairie region .....	16.07				11.2	19.1
17. Missouri River Belt .....	22.20	18.38			23.2	27.1
18. Region of the Western Plains .....	20.83					
19. Heavily-timbered region of the Northwest.....	8.73					17.4
20. Cordilleran region .....	14.65				5.5	26.6
21. Pacific Coast region.....	7.60	12.33			17.8	10.3

The mean age at death of those reported as dying of puerperal septicæmia during the census year was 28 years.

Closely connected with the subject of deaths of mothers in child-birth is that of infants reported as still-born or as being the victims of infanticide. The total number of children reported as still-born in the Census of 1880 was 24,876, being 3,287 out of each 100,000 deaths from all causes, as against 1,841 for the Census of 1870, 391 for the Census of 1860, and 117 for the Census of 1850. This increase is probably chiefly, if not entirely, due to the greater completeness and accuracy of the schedules of death of the last census. The following diagram in connection with Map No. 18 shows the geographical distribution of deaths reported as due to this cause:

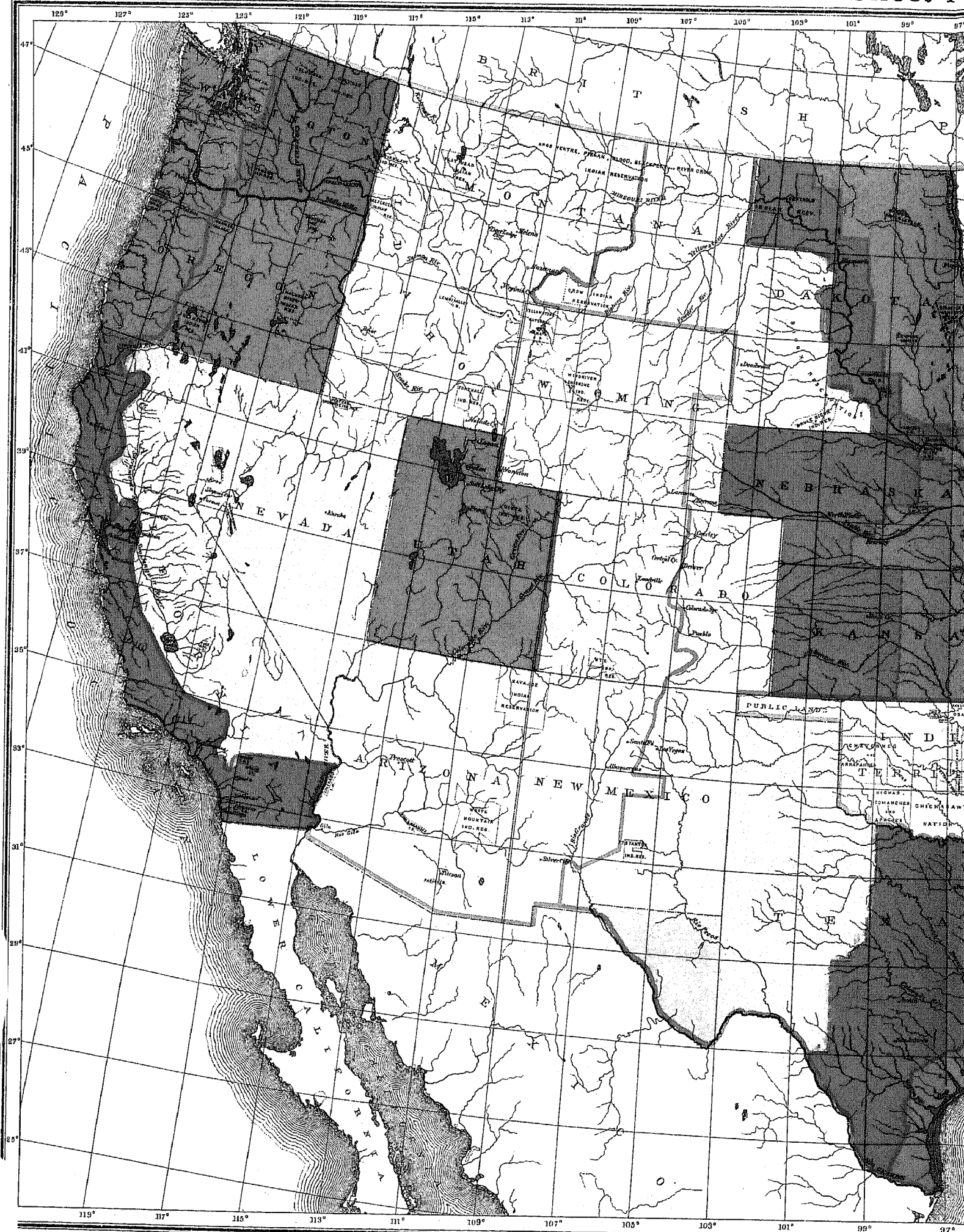
FIG. 70.—STILL-BORN IN 21 GRAND GROUPS, WITH DISTINCTION OF SEX PER 1000 DEATHS FROM KNOWN CAUSES.



In examining the map and diagram it is to be borne in mind that still-births are not included in the records of death copied for the state of New Jersey, and therefore that the comparatively low proportion of still-births in that state is deceptive, the truth being that it was probably quite as great as in the immediate vicinity. This map should be studied in connection with those referred to below, indicating the birth-rate in different sections of the country.

Of the total number of cases classified as still-born, 14,590 were males and 10,286 females, or 141.8 males to every 100 females, showing the marked influence of sex in this respect, especially when we compare it with the sex proportion in children born alive, which was 104.2 males per 100 females.

It should be remembered in this connection that the term "still-born" is commonly employed to designate not only those children actually born dead, but also those who are born alive but who live only a few moments or hours. These last probably comprise about one-fifth of the whole number.







For each 1000 male births, including still-births, there were reported in the United States during the census year 18.1 still-births, and for each 1000 female births 13.4 still-births, the average ranging from 46.3 per 1000 male births and 43.8 per 1000 female births in the cities of San Francisco and Oakland, to 2.6 per 1000 male births and 2.5 per 1000 female births in Arizona. Comparing these figures with those given by Bertillon<sup>(a)</sup> for Denmark, Sweden, France, and Belgium, as shown in the following table, we find that the proportion of still-births reported in the United States is much less than in those of the countries named, which is, no doubt, largely due to incompleteness of our records:

TABLE 73.—SHOWING FOR DENMARK, SWEDEN, FRANCE, AND BELGIUM, THE NUMBER OF STILL-BIRTHS IN 1000 BIRTHS.

	Denmark, 1869-'69.	Sweden, 1861-'67.	France, 1895-'97.	Belgium, 1860-'65.
Males .....	43.15	36.6	39.5	40.0
Females .....	34.44	28.6	28.9	31.4
In the capital city .....	42.85			
In the rural districts .....	39.6	31.6	29.8	33.7

These figures of Bertillon include only those children actually born dead, while the census figures include also a number of children who were born alive but who lived only an hour or two.

The following table shows the proportion of reported still-births to reported births in each state and territory, with distinction of sex:

TABLE 74.—SHOWING FOR STATES AND TERRITORIES, AND FOR CERTAIN STATES WITH DISTINCTION OF COLOR, THE PROPORTION OF STILL-BIRTHS IN 1000 BIRTHS.

States and Territories.	TOTAL.		WHITE.		COLORED.		States and Territories.	TOTAL.		WHITE.		COLORED.	
	M.	F.	M.	F.	M.	F.		M.	F.	M.	F.	M.	F.
Alabama .....	13.9	10.1	10.6	8.4	17.4	11.8	Missouri .....	20.7	15.4				
Arizona .....	2.6	2.5					Montana .....	4.6	6.7				
Arkansas .....	10.6	7.8	10.3	7.9			Nebraska .....	11.3	7.1				
California .....	21.2	19.1					Nevada .....	7.1	8.8				
Colorado .....	9.5	5.5					New Hampshire .....	12.5	11.8				
Connecticut .....	16.9	11.8					New Jersey .....						
Dakota .....	9.8	5.1					New Mexico .....	9.9	5.6				
Delaware .....	6.1	4.3	7.1	9.7			New York .....	33.0	26.9				
District of Columbia .....							North Carolina .....	14.4	9.9	13.8	8.9	15.2	11.2
Florida .....	7.1	4.9	4.4	5.0	10.1	4.8	Ohio .....	21.1	14.7				
Georgia .....	15.0	11.8	13.5	10.1	16.7	13.5	Oregon .....	11.4	8.4				
Idaho .....	2.1	2.2					Pennsylvania .....	16.8	12.0				
Illinois .....	18.7	14.5					Rhode Island .....	34.2	23.0				
Indiana .....	21.6	15.0					South Carolina .....	16.1	13.2	9.7	8.6	10.7	15.6
Iowa .....	11.3	8.3					Tennessee .....	18.4	13.3	18.0	13.0		
Kansas .....	13.0	10.3					Texas .....	14.9	10.5	13.7	10.0		
Kentucky .....	18.2	12.4					Utah .....	10.4	7.5				
Louisiana .....	11.1	10.0	9.9	9.5	12.2	10.4	Vermont .....	20.0	17.1				
Maine .....	11.0	9.5					Virginia .....	18.2	13.1	13.9	10.4	23.5	16.3
Maryland .....	31.3	23.1	30.2	20.0			Washington territory .....	11.2	7.5				
Massachusetts .....	38.8	26.2					West Virginia .....	13.2	9.8				
Michigan .....	14.4	11.6					Wisconsin .....	13.9	9.9				
Minnesota .....	11.9	6.7					Wyoming .....						
Mississippi .....	12.3	8.3	11.8	6.3	12.6	9.7							

It will be seen from table 75 that the proportion of infants reported as still-born is much greater in the cities than in the country, decidedly greater among those of German than among those of Irish parentage, and somewhat greater among the colored race than among the whites. A certain number of cases reported as still-born are really cases of infanticide.

The proportion of deaths reported as due to infanticide is highest among the colored population, being 14 out of each 100,000 deaths from specified causes, while for the whites in the same regions it is 5, and in the large cities 3, and in the rural districts 5 per 100,000.

## MORTALITY AND VITAL STATISTICS.

Where the mortality of the mothers is least the number of still-births is often the greatest, as is shown by the following diagram:

FIG. 71.—DEATHS FROM CHILD-BIRTH AND STILL-BORN IN 21 GRAND GROUPS PER 1000 DEATHS FROM KNOWN CAUSES.

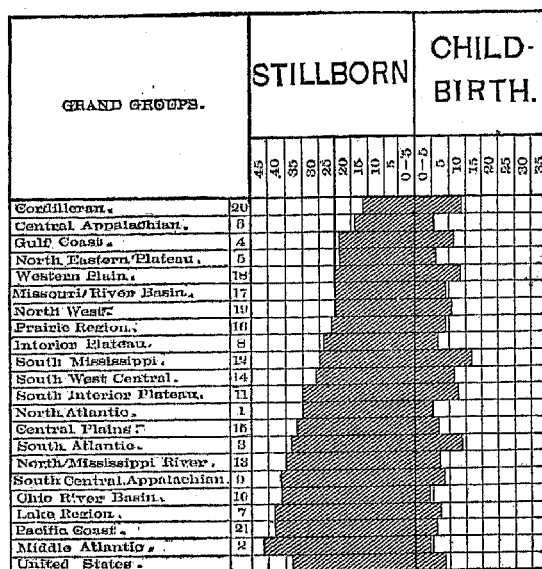


TABLE 75.—SHOWING FOR RURAL AND CITIES, WITH DISTINCTION OF SEX, AND FOR WHITE AND COLORED, IRISH AND GERMAN PARENTAGE, THE PROPORTION OF DEATHS FROM STILL-BORN IN 1000 DEATHS FROM KNOWN CAUSES.

Grand Groups.	RURAL.		CITIES.		White.	Colored.	Irish parentage.	German parentage.
	Male.	Female.	Male.	Female.				
Total.....	33.2	23.8	59.2	50.1	36.4	30.6	24.7	34.9
1. North Atlantic Coast region.....	31.5	21.6	64.4	41.7			17.8	15.4
2. Middle Atlantic Coast region.....	16.8	11.1	66.7	56.3	49.1	38.0	30.4	59.3
3. South Atlantic Coast region.....	35.0	23.9	102.5	93.9	25.3	48.9		
4. Gulf Coast region.....	17.0	19.9	32.5	38.4	21.1	20.0		
5. Northeastern Hills and Plateaus.....	27.8	17.7	54.3	43.8			23.7	36.1
6. Central Appalachian region.....	23.2	16.3	1.2	4.0			10.5	5.0
7. Region of the Great Northern Lakes.....	29.1	22.7	64.0	54.7			17.0	36.5
8. The Interior Plateau.....	32.6	21.1	36.6	32.2	26.9	43.3	11.5	13.7
9. Southern Central Appalachian region.....	40.7	32.6			41.6	39.1		
10. The Ohio River Belt.....	42.3	27.5	67.3	55.4	41.6	45.4	10.5	31.3
11. Southern Interior plateau.....	41.2	29.6			30.5	38.9		
12. South Mississippi River Belt.....	33.6	26.1			26.5	33.1		
13. North Mississippi River Belt.....	20.8	20.4	27.8	62.5			13.6	26.3
14. Southwest Central region.....	35.4	26.6			28.9	40.7		
15. Central region, plains and prairies.....	43.3	28.8	50.8	49.1	36.9	39.9		
16. The Prairie region.....	32.8	22.3					10.8	22.2
17. Missouri River Belt.....	30.8	20.5	14.1	7.3			12.8	11.4
18. Region of the Western Plains.....	26.5	23.1	17.3	38.6			26.0	7.0
19. Heavily-timbered region of the Northwest.....	28.3	19.6					7.6	12.7
20. Cordilleran region.....	15.5	17.2					11.1	7.1
21. Pacific Coast region.....	21.7	26.8	53.5	75.5			64.0	39.0

## DISEASES OF THE NERVOUS SYSTEM.

The total number of deaths reported as due to diseases of the nervous system was 81,905, of which 44,174 occurred in males and 37,731 in females. In each 100,000 deaths from all causes they are reported as causing 10,821 deaths, as against 11,366 in 1870, and 9,237 in 1860. In England and Wales for the 10 years 1870-'79, in each 100,000 deaths they caused 13,025, and in 1880, 13,154. In the 50 large cities in the United States, out of each 1000 deaths from known causes they caused 124.1, and in the remainder of the country 110.8. In those regions where the color distinction was made they caused, for the whites, out of each 1000 deaths, 119.1, and for

the colored, 96.9; and in the regions where distinction of Irish and German parentage was made they caused, for the Irish, 94.7, and for the German, 109.4 deaths. The proportions, per 1000 deaths from specified causes, were, in males 118.62 and in females 108.61.

The following table shows the relations of the deaths reported as due to this cause to certain groups of ages:

TABLE 76.—SHOWING FOR CERTAIN GROUPS OF AGES THE NUMBER OF DEATHS FROM DISEASES OF THE NERVOUS SYSTEM, AND THE PROPORTION OF DEATHS FROM THESE CAUSES PER 1,000,000 DEATHS AT THE CORRESPONDING AGE GROUPS, WITH DISTINCTION OF SEX, OF RURAL AND CITIES, AND, FOR CERTAIN REGIONS, OF COLOR AND PARENTAGE.

Deaths from diseases of the nervous system in—		DEATHS.				PROPORTION IN 1,000,000 DEATHS AT CERTAIN AGES.			
		Under 5.	5-15.	15-65.	65 and over.	Under 5.	5-15.	15-65.	65 and over.
The United States.....	{ M.	20,677	2,004	12,129	8,108	137,503	93,847	89,117	155,956
	{ F.	17,140	2,078	10,185	7,615	134,856	83,046	73,516	158,534
Rural .....	{ M.	14,477	2,471	9,133	6,960	131,130	92,308	87,622	155,392
	{ F.	12,077	2,226	7,939	6,332	129,353	81,832	72,039	162,230
Cities .....	{ M.	6,200	523	2,996	1,238	155,490	101,870	94,007	150,742
	{ F.	5,063	452	2,220	1,283	148,011	80,594	79,310	142,508
White in 10 Grand Groups .....	{ M.	9,026	1,399	5,965	4,007	140,505	108,240	94,108	166,173
	{ F.	8,199	1,253	4,902	3,742	140,415	98,615	75,354	162,350
Colored in 10 Grand Groups .....	{ M.	2,015	502	1,088	373	128,522	111,308	67,725	88,788
	{ F.	2,395	441	1,137	471	119,792	88,050	58,007	114,237
Irish parentage in 14 Grand Groups .....	{ M.	819	138	980	565	125,191	88,803	77,833	125,217
	{ F.	677	107	764	478	122,689	74,513	65,919	122,345
German parentage in 14 Grand Groups .....	{ M.	1,223	110	786	364	156,815	69,180	83,000	121,091
	{ F.	934	115	514	273	143,604	70,595	73,334	116,517

### MENTAL DISEASES.

Figure 72 shows the proportion of deaths reported as due to or connected with mental diseases in relation to age, with distinction of sex. The numbers represented in this diagram and in table 77, being only 630 for males and 602 for females, are too small to make the proportions derived from them of any scientific value, and the figures as given are rather to suggest than to answer queries:

FIG. 72.—DEATHS FROM MENTAL DISEASES AT CERTAIN GROUPS OF AGES IN 1000 DEATHS CAUSED BY THESE DISEASES.

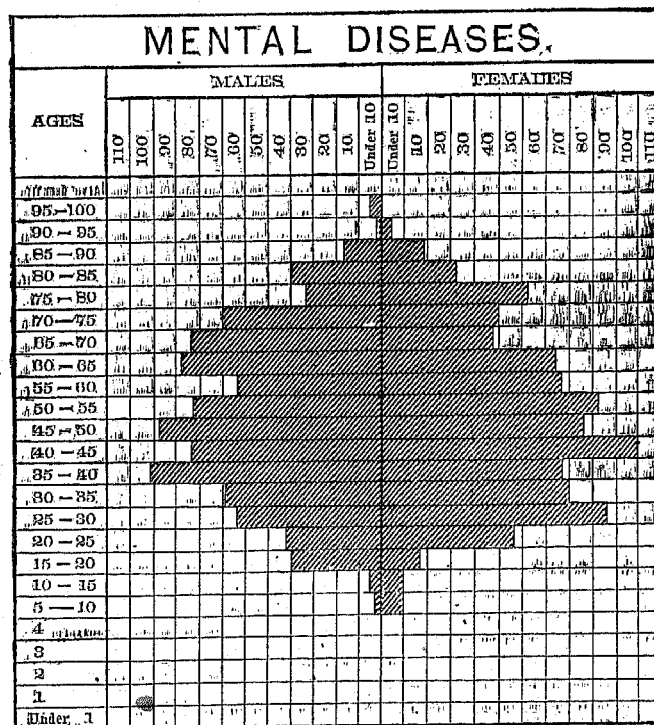


TABLE 77.—SHOWING THE NUMBER OF DEATHS FROM MENTAL DISEASES AT EACH GROUP OF AGES IN 1000 DEATHS REPORTED AS CAUSED BY THESE DISEASES.

Ages.	Males.	Females.	Ages.	Males.	Females.	Ages.	Males.	Females.
Under 1 year .....			15-20 years .....	40.20	16.81	60-65 years .....	88.67	73.95
1 year .....			20-25 years .....	41.87	55.46	65-70 years .....	83.74	48.74
2 years .....			25-30 years .....	64.41	95.80	70-75 years .....	70.65	50.42
3 years .....			30-35 years .....	69.24	80.87	75-80 years .....	33.82	62.18
4 years .....			35-40 years .....	101.45	77.31	80-85 years .....	40.26	31.93
Total under 5 years .....			40-45 years .....	85.35	110.92	85-90 years .....	17.71	18.49
5-10 years .....	3.22	10.08	45-50 years .....	90.84	85.71	90-95 years .....	1.61	3.36
10-15 years .....	6.44	10.08	50-55 years .....	83.74	92.44	95 and over .....	3.22	
			55-60 years .....	64.41	75.63	Unknown .....	14.49	11.76

## APOPLEXY AND PARALYSIS.

The total number of deaths reported as due to apoplexy during the census year was 9,658, of which 5,262 were of males and 4,396 of females. The number of deaths reported as due to paralysis was 13,907, of which 7,043 were of males and 6,864 were of females. As reported to the enumerators these two causes of death have, to a great extent, the same signification, and should therefore be considered together.

Apoplexy caused 1,276 deaths out of each 100,000 deaths from all causes in 1880, as against 1,062 in 1870, 782 in 1860, and 606 in 1850.

Paralysis caused 1,837 deaths out of each 100,000 deaths from all causes in 1880, 1,524 in 1870, 1,176 in 1860, and 839 in 1850. The progressive increase in the proportion of deaths from these two diseases indicated by the above figures is no doubt in part apparent only, but it probably also indicates a real increase in the proportion of deaths from brain disease. In England and Wales for the 10 years 1870-'79 apoplexy caused 2,489 in each 100,000 deaths from specified causes, and paralysis 2,375. In the year 1880 apoplexy caused 2,709 and paralysis 2,257 deaths in each 100,000 deaths from specified causes. Out of each 1000 deaths of which the causes are known in the United States during the census year, apoplexy caused 14.13 deaths in males and 12.66 in females, and paralysis caused 18.91 deaths in males and 19.76 in females.

Combining the figures of the two diseases, we find that they caused a greater proportion of deaths in the rural districts (33.9) than in the large cities (28.7), a much greater proportion in the whites (35.1) than in the colored (15.9), and somewhat greater in those of Irish (34.7) than in those of German parentage (30.7).

TABLE 78.—SHOWING FOR RURAL AND CITIES, WITH DISTINCTION OF SEX, AND FOR WHITE AND COLORED, IRISH AND GERMAN PARENTAGE, THE PROPORTION OF DEATHS FROM PARALYSIS AND APOPLEXY IN 1000 DEATHS FROM KNOWN CAUSES.

Grand Groups.	RURAL.		CITIES.		White.	Colored.	Irish parentage.	German parentage.
	Male.	Female.	Male.	Female.				
Total .....	34.2	33.5	28.9	28.5	35.1	15.9	34.7	30.7
1. North Atlantic Coast region .....	68.1	67.1	32.8	34.3			32.0	27.7
2. Middle Atlantic Coast region .....	43.2	43.8	27.7	29.5	34.1	24.8	30.2	31.9
3. South Atlantic Coast region .....	24.8	25.4	45.3	35.7	36.7	21.1		
4. Gulf Coast region .....	26.2	16.2	30.9	26.0	28.5	18.5		
5. Northeastern Hills and Plateaus .....	60.8	63.1	60.3	53.5			32.0	32.8
6. Central Appalachian region .....	45.3	46.8	22.2	25.5			38.8	43.1
7. Region of the Great Northern Lakes .....	40.5	39.0	22.8	18.6			48.1	24.8
8. The Interior Plateau .....	55.7	53.7	34.0	35.5	53.3	21.0	45.0	51.2
9. Southern Central Appalachian region .....	26.5	25.7			30.0	18.1		
10. The Ohio River Belt .....	34.2	36.0	25.6	22.0	33.8	16.8	54.3	30.1
11. Southern Interior Plateau .....	22.34	17.6			31.5	11.3		
12. South Mississippi River Belt .....	13.1	14.4			16.5	11.5		
13. North Mississippi River Belt .....	23.0	23.5	20.4	15.9			24.6	26.0
14. Southwest Central region .....	13.2	11.7			12.9	10.8		
15. Central region, plains and prairies .....	31.9	30.9	24.1	15.6	33.2	14.9		
16. The Prairie region .....	25.7	23.4					30.5	24.8
17. Missouri River Belt .....	18.8	21.6	11.3	14.7			17.9	24.6
18. Region of the Western Plains .....	9.7	12.7	6.9	16.5			38.9	14.0
19. Heavily-timbered region of the Northwest .....	38.2	20.6					40.0	25.3
20. Cordilleran region .....	27.2	19.5					49.2	28.2
21. Pacific Coast region .....	40.0	30.9	39.9	32.6			42.2	53.0



The greatest proportion of deaths from these causes occur at ages over 65 years. If we take this group of ages and compare the deaths from apoplexy and paralysis to the total number of deaths from specified causes reported at the same ages, we find that the proportion of deaths is greater in females than in males, in the rural districts than in the cities, in the whites than in the colored, and in those of German than in those of Irish parentage. In the cities the proportion of deaths is greater in the females than in the males. These and other relations are shown by the following table:

TABLE 79.—SHOWING FOR CERTAIN GROUPS OF AGES THE NUMBER OF DEATHS FROM APOPLEXY AND PARALYSIS, AND THE PROPORTION OF DEATHS FROM THESE CAUSES PER 1,000,000 DEATHS AT THE CORRESPONDING AGE GROUPS, WITH DISTINCTION OF SEX, OF RURAL AND CITIES, AND, FOR CERTAIN REGIONS, OF COLOR AND PARENTAGE.

Deaths from apoplexy and paralysis in—		DEATHS.				PROPORTION IN 1,000,000 DEATHS AT CERTAIN AGES.			
		Under 5.	5-15.	15-65.	65 and over.	Under 5.	5-15.	15-65.	65 and over.
The United States .....	{ M.	406	204	5,323	6,262	3,100	6,304	89,110	119,126
	{ F.	413	188	4,496	6,128	3,297	5,075	32,516	127,576
Rural .....	{ M.	323	171	3,925	5,392	2,920	6,388	37,656	120,314
	{ F.	304	154	3,440	5,141	3,256	5,061	31,215	131,716
Cities .....	{ M.	143	33	1,398	870	3,586	6,428	43,866	112,258
	{ F.	109	20	1,056	987	3,180	5,748	37,627	109,630
White in 10 Grand Groups .....	{ M.	261	98	2,627	3,117	3,810	7,582	41,439	126,425
	{ F.	230	95	2,133	2,988	3,980	7,477	32,788	129,637
Colored in 10 Grand Groups .....	{ M.	39	35	346	258	1,720	7,761	21,538	61,414
	{ F.	39	23	441	353	1,951	4,593	22,499	85,617
Irish parentage in 14 Grand Groups .....	{ M.	21	6	470	372	3,210	3,861	37,328	92,239
	{ F.	14	8	389	364	2,537	5,571	33,561	93,166
German parentage in 14 Grand Groups .....	{ M.	22	7	398	287	2,821	4,070	42,058	95,476
	{ F.	14	7	243	238	2,153	4,207	34,070	101,579

The mean age at death of those reported as dying of apoplexy and paralysis during the census year was 61 years.

Figure 71 shows the proportion of deaths reported as due to apoplexy and paralysis at different ages, with distinction of sex. This is a tolerably regular figure, indicating the progressive increase of mortality from this cause with advancing years, and also that the rates are nearly uniform in the two sexes.

FIG. 73.—DEATHS FROM APOPLEXY AND PARALYSIS AT CERTAIN GROUPS OF AGES IN 1000 DEATHS CAUSED BY THESE DISEASES.

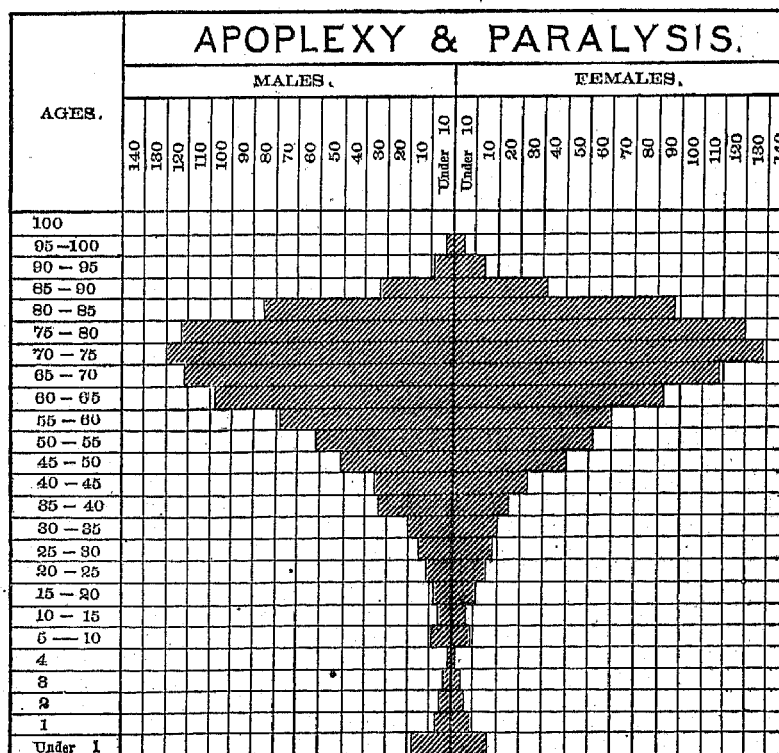
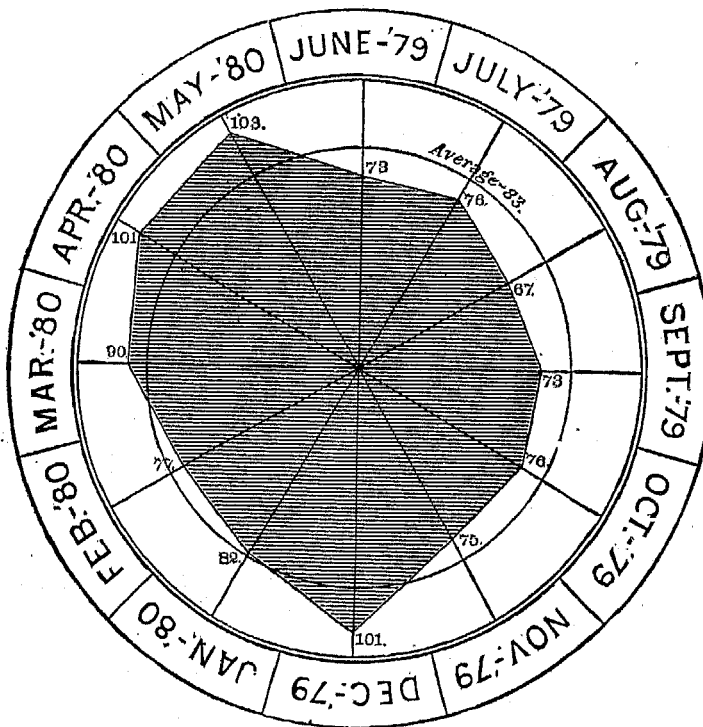


TABLE 80.—SHOWING THE NUMBER OF DEATHS FROM APOPLEXY AND PARALYSIS AT EACH GROUP OF AGES IN 1000 DEATHS REPORTED AS CAUSED BY THESE DISEASES.

Ages.	Males.	Females.	Ages.	Males.	Females.	Ages.	Males.	Females.
Under 1 year .....	18.11	16.57	15-20 years .....	9.22	11.67	60-65 years .....	108.52	93.67
1 year .....	7.83	8.37	20-25 years .....	13.46	14.43	65-70 years .....	122.07	118.18
2 years .....	5.71	5.25	25-30 years .....	16.23	17.37	70-75 years .....	131.94	136.72
3 years .....	3.42	4.18	30-35 years .....	20.88	20.85	75-80 years .....	123.05	130.74
4 years .....	2.93	2.40	35-40 years .....	34.76	25.49	80-85 years .....	85.10	97.86
Total under 5 years..	38.02	36.80	40-45 years .....	36.63	35.20	85-90 years .....	33.78	42.09
5-10 years .....	9.05	8.82	45-50 years .....	51.65	50.62	90-95 years .....	9.05	14.17
10-15 years .....	6.60	7.57	50-55 years .....	63.64	61.76	95 and over .....	4.10	5.79
			55-60 years .....	79.31	69.60	Unknown .....		

The following diagram shows the distribution of the deaths reported as due to apoplexy in the 31 registration cities in relation to the months in which the deaths were reported. It will be seen that the greatest proportion occurred from December to May, and the least in the remaining months; that is, that the number of deaths reported is greatest in the half-year immediately preceding the date of the census:

FIG. 74.—DEATHS FROM APOPLEXY, BY MONTHS, IN 31 REGISTRATION CITIES.



## TETANUS AND TRISMUS NASCENTIUM.

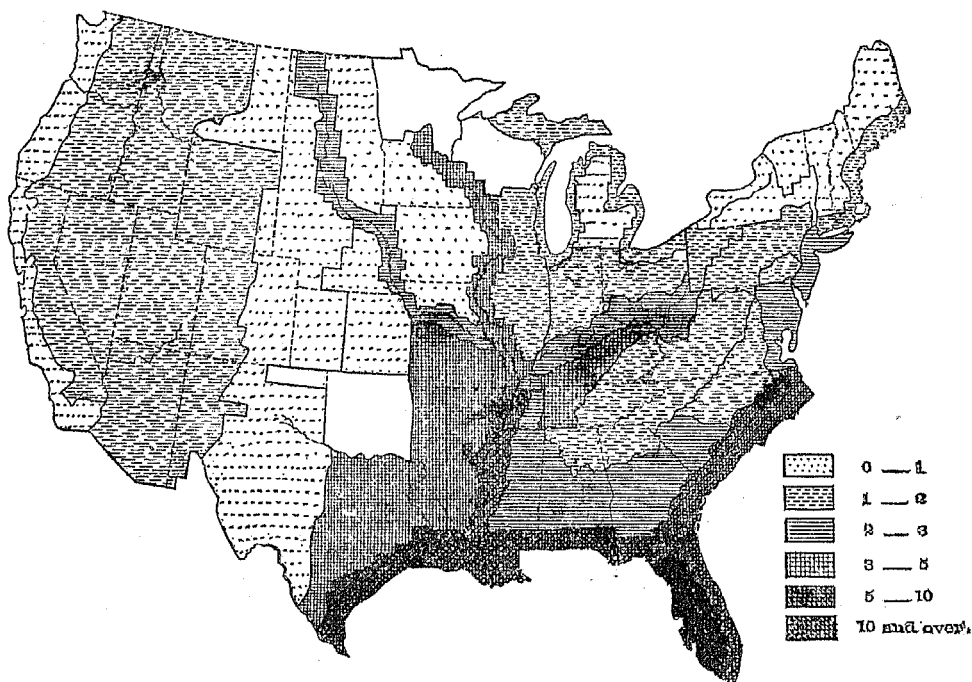
The total number of deaths reported as due to these causes was 2,537, of which 1,578 were of males and 959 of females. Out of each 100,000 deaths from all causes, these diseases caused in 1880, 335; in 1870, 330; in 1860, 411; in 1850, 215.

The mean age at death of those reported as dying from tetanus and trismus nascentium during the census year was 8 years.

The proportion of deaths from these causes per 1000 deaths from all known causes is decidedly higher in the male than in the female, in the cities than in the rural districts, in the colored race than in the white, in the southern part of the country than in the northern regions. In the city of Charleston the proportion of deaths attributed to this cause is in males 76.2 per 1000, in females 44.7, while in the rural portions of the South Atlantic coast region the proportions reported are for males 9.6 and for females 7.3. On the Gulf coast, throughout the rural districts, the proportions of deaths from these causes are for males 32 and for females 29.5, and in the city of New Orleans, males 45.4 and females 44.8. Taking the whole of this region the proportions of deaths from these causes

are for the whites 33.5 and for the colored 39.3 per 1000. The extreme contrast to this is found on the North Atlantic coast, in the rural districts of which the proportions of deaths attributed to these causes are for males 0.2 and for females 0.7, and, in the cities, males 1.5 and females 0.7.

FIG. 75.—DEATHS FROM TETANUS AND TRISMUS NASCENTIUM PER 1000 DEATHS FROM KNOWN CAUSES. IN 6 SHADES.



Among the decedents of Irish parentage the proportion of deaths from this cause is 1.6, and among those of German parentage 2.2 per 1000, these comparatively low rates being due largely to the fact that the majority of the population of these races is located in the northern part of the country.

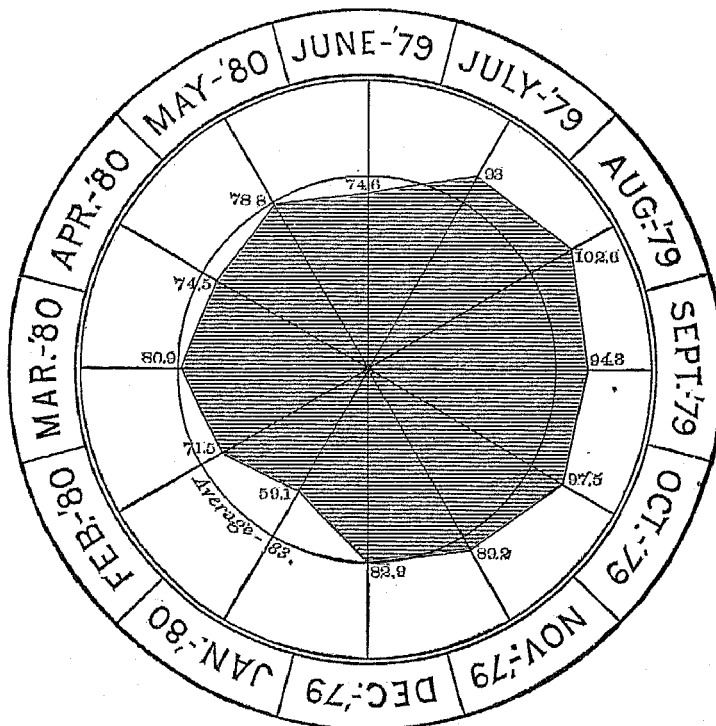
TABLE 81.—SHOWING FOR RURAL AND CITIES, WITH DISTINCTION OF SEX, AND FOR WHITE AND COLORED, IRISH AND GERMAN PARENTAGE, THE PROPORTION OF DEATHS FROM TETANUS AND TRISMUS NASCENTIUM IN 1000 DEATHS FROM KNOWN CAUSES.

Grand Groups.	RURAL.		CITIES.		White.	Colored.	Irish parentage.	German parentage.
	Male.	Female.	Male.	Female.				
Total.....	3.4	2.0	6.0	5.2	3.1	9.8	1.6	2.2
1. North Atlantic Coast region .....	0.2	0.7	1.5	0.7	.....	.....	1.5	1.5
2. Middle Atlantic Coast region .....	5.9	2.8	3.8	3.1	3.0	9.1	2.2	2.8
3. South Atlantic Coast region .....	9.6	7.3	70.2	44.7	5.6	22.5	.....	.....
4. Gulf Coast region .....	32.0	20.5	45.4	44.8	33.5	39.3	.....	.....
5. Northeastern Hills and Plateaus .....	0.9	0.6	1.0	.....	.....	.....	1.3	.....
6. Central Appalachian region .....	2.5	0.6	2.4	.....	.....	.....	0.6	2.1
7. Region of the Great Northern Lakes .....	0.9	0.5	2.0	1.9	.....	.....	1.1	2.0
8. The Interior Plateau .....	2.0	0.9	4.1	1.9	1.7	3.3	1.4	2.0
9. Southern Central Appalachian region .....	1.2	0.7	.....	.....	0.9	1.3	.....	.....
10. The Ohio River Belt .....	2.6	1.5	5.9	4.9	2.7	5.3	1.2	2.8
11. Southern Interior Plateau .....	3.3	1.8	.....	.....	1.7	3.2	.....	.....
12. South Mississippi River Belt .....	7.9	5.5	.....	.....	3.3	9.5	.....	.....
13. North Mississippi River Belt .....	3.1	1.0	26.5	21.3	.....	.....	1.7	1.4
14. Southwest Central region .....	6.0	4.5	.....	.....	3.1	14.0	.....	.....
15. Central region, plains and prairies .....	3.0	1.4	5.7	4.9	1.9	5.4	.....	.....
16. The Prairie region .....	1.5	0.7	.....	.....	.....	.....	1.7	1.0
17. Missouri River Belt .....	3.0	1.2	.....	7.3	.....	.....	.....	5.2
18. Region of the Western Plains .....	0.4	.....	.....	.....	.....	.....	.....	.....
19. Heavily-timbered region of the Northwest .....	0.4	.....	.....	.....	.....	.....	.....	.....
20. Cordilleran region .....	1.8	0.7	.....	.....	.....	.....	1.5	.....
21. Pacific Coast region .....	2.2	.....	1.3	1.6	.....	.....	0.7	1.5

## MORTALITY AND VITAL STATISTICS.

The following diagram shows the distribution of deaths from tetanus and trismus nascentium in 31 registration cities, by months. It will be seen that they were most frequent during the months of July, August, September, and October, and lowest during January and February:

FIG. 76.—DEATHS FROM TETANUS AND TRISMUS NASCENTIUM, BY MONTHS, IN 31 REGISTRATION CITIES.



## DISEASES OF THE RESPIRATORY SYSTEM.

The total number of deaths reported as due to diseases of the respiratory system was 104,824, giving a proportion of 138.49 per 1000 deaths from all causes.

This proportion was, in 1870, 130.37; in 1860, 127.33; and in 1850, 98.07. The following table shows their relations as a whole, including croup and pneumonia, which have been considered separately above:

TABLE 82.—SHOWING FOR RURAL AND CITIES, WITH DISTINCTION OF SEX, AND FOR WHITE AND COLORED, IRISH AND GERMAN PARENTAGE, THE PROPORTION OF DEATHS FROM DISEASES OF THE RESPIRATORY SYSTEM IN 1000 DEATHS FROM KNOWN CAUSES.

Grand Groups.	RURAL.		CITIES.		White.	Colored.	Irish parentage.	German parentage.
	Male.	Female.	Male.	Female.				
Total.....	159.9	136.0	138.9	133.4	144.2	152.2	147.6	142.2
1. North Atlantic Coast region.....	122.2	118.7	141.7	139.6			145.4	151.1
2. Middle Atlantic Coast region.....	141.4	130.2	153.7	146.3	146.8	140.0	155.8	157.1
3. South Atlantic Coast region.....	122.5	91.7	91.7	70.4	97.1	112.5		
4. Gulf Coast region.....	134.4	112.4	95.1	99.2	105.2	125.9		
5. Northeastern Hills and Plateaus.....	133.1	122.7	138.5	142.3			138.7	118.5
6. Central Appalachian region.....	142.7	132.0	183.1	138.6			127.9	123.8
7. Region of the Great Northern Lakes.....	135.3	112.4	134.2	128.9			124.9	120.0
8. The Interior Plateau.....	132.4	121.1	126.3	117.5	122.9	188.8	140.8	124.5
9. Southern Central Appalachian region.....	168.4	149.7			155.8	168.9		
10. The Ohio River Belt.....	135.8	114.5	122.9	127.0	124.4	134.4	111.7	127.4
11. Southern Interior Plateau.....	182.2	149.8			166.4	165.3		
12. South Mississippi River Belt.....	179.2	143.9			162.7	163.2		
13. North Mississippi River Belt.....	193.9	172.6	126.4	132.1			174.4	172.6
14. Southwest Central region.....	218.6	165.6			189.5	194.7		
15. Central region, plains and prairies.....	166.0	131.4	117.6	121.1	147.6	144.8		
16. The Prairie region.....	181.0	146.9					157.5	128.5
17. Missouri River Belt.....	229.7	177.4	248.5	183.8			212.2	213.0
18. Region of the Western Plains.....	148.9	135.9	211.8	132.6			285.7	154.9
19. Heavily-timbered region of the Northwest.....	118.1	79.4					112.3	105.5
20. Cordilleran region.....	191.8	156.2					214.2	183.7
21. Pacific Coast region.....	103.3	108.7	131.7	122.1			147.6	99.8

# CAUSES OF DEATH.

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The following table shows the relations of the deaths reported as due to these diseases to certain groups of ages:

TABLE 83.—SHOWING FOR CERTAIN GROUPS OF AGES THE NUMBER OF DEATHS FROM DISEASES OF THE RESPIRATORY SYSTEM, AND THE PROPORTION OF DEATHS FROM THESE CAUSES PER 1,000,000 DEATHS AT THE CORRESPONDING AGE GROUPS, WITH DISTINCTION OF SEX, OF RURAL AND CITIES, AND, FOR CERTAIN REGIONS, OF COLOR AND PARENTAGE.

Deaths from diseases of the respiratory system in—		DEATHS.				PROPORTION IN 1,000,000 DEATHS AT CERTAIN AGES.			
		Under 5.	5-15.	15-65.	65 and over.	Under 5.	5-15.	15-65.	65 and over.
The United States.....	{ M. F.	24, 015 20, 409	3, 721 3, 507	21, 495 15, 695	7, 704 7, 232	163, 769 150, 980	110, 695 110, 015	157, 933 113, 511	146, 559 150, 560
Rural.....	{ M. F.	18, 429 14, 079	2, 985 2, 800	17, 750 12, 997	0, 600 5, 235	100, 626 100, 435	111, 510 106, 242	170, 293 117, 936	147, 470 149, 497
Cities.....	{ M. F.	6, 186 5, 430	738 677	3, 745 2, 698	1, 095 1, 897	155, 139 158, 739	143, 358 134, 162	117, 508 90, 134	141, 290 155, 170
White in 10 Grand Groups.....	{ M. F.	11, 096 9, 231	1, 541 1, 455	9, 717 7, 300	3, 584 3, 457	101, 902 158, 089	119, 226 112, 939	153, 277 113, 138	145, 366 149, 985
Colored in 10 Grand Groups.....	{ M. F.	3, 252 3, 219	550 610	2, 931 2, 330	671 477	169, 834 161, 006	121, 351 123, 602	182, 446 118, 871	159, 724 115, 692
Irish parentage in 14 Grand Groups.....	{ M. F.	1, 130 923	170 102	1, 847 1, 350	641 690	172, 730 174, 339	115, 187 112, 813	140, 601 116, 470	158, 939 176, 608
German parentage in 14 Grand Groups.....	{ M. F.	1, 237 1, 025	208 193	1, 348 769	456 380	158, 610 157, 595	120, 930 118, 478	142, 450 109, 716	151, 697 162, 185

## BRONCHITIS.

The total number of deaths reported as due to bronchitis was 10,984, of which 5,640 were of males and 5,344 of females. In each 100,000 deaths from all causes it caused in 1880, 1,451; in 1870, 864; in 1860, 585; and in 1850, 1,118 deaths. In England and Wales during the 10 years 1870-79, bronchitis caused in each 100,000 deaths from specified causes 10,586, and in 1880, 10,988 deaths. In each 1000 deaths from specified causes in the United States for the census year, bronchitis is reported as causing in males 15.15 and in females 15.38 deaths. It caused a much greater proportion of deaths in the large cities (27.1) than in the rural districts (11.8), and in those regions where distinctions of color or parentage were made it caused a greater proportion of deaths in the white (17.3) than in the colored (12.8); and in those of Irish parentage (23.5) than in those of German parentage (17.0).

The following table and cartogram show by grand groups the varying proportions of deaths reported as due to this cause in different regions of the country:

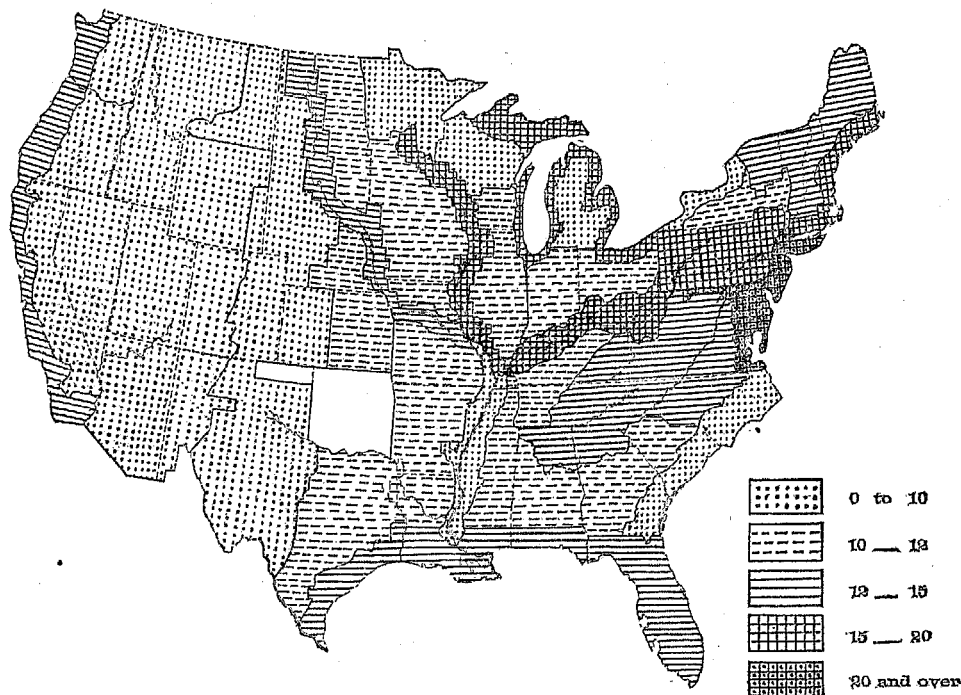
TABLE 84.—SHOWING FOR RURAL AND CITIES, WITH DISTINCTION OF SEX, AND FOR WHITE AND COLORED, IRISH AND GERMAN PARENTAGE, THE PROPORTION OF DEATHS FROM BRONCHITIS IN 1000 DEATHS FROM KNOWN CAUSES.

Grand Groups.	RURAL.		CITIES.		White.	Colored.	Irish parentage.	German parentage.
	Male.	Female.	Male.	Female.				
Total.....	11.8	11.7	26.1	23.1	17.3	12.8	23.5	17.0
1. North Atlantic Coast region.....	12.3	18.0	30.0	30.2	.....	.....	23.0	24.6
2. Middle Atlantic Coast region.....	15.8	19.2	32.7	36.3	30.2	24.2	35.8	32.3
3. South Atlantic Coast region.....	8.0	0.6	17.8	14.5	9.2	8.9	.....	.....
4. Gulf Coast region.....	9.5	8.2	21.2	27.2	13.6	15.3	.....	.....
5. Northeastern Hills and Plateaus.....	11.3	12.6	17.0	21.0	.....	.....	14.9	25.7
6. Central Appalachian region.....	15.3	14.6	28.4	24.2	.....	.....	12.4	9.3
7. Region of the Great Northern Lakes.....	8.1	9.0	21.4	20.0	.....	.....	10.9	8.1
8. The Interior Plateau.....	13.2	12.1	20.9	21.0	14.7	13.5	12.9	10.4
9. Southern Central Appalachian region.....	14.9	13.2	.....	.....	14.5	12.3	.....	.....
10. The Ohio River Belt.....	13.3	10.4	24.2	25.4	14.9	17.4	19.5	19.3
11. Southern Interior Plateau.....	11.6	10.0	.....	.....	13.7	8.6	.....	.....
12. South Mississippi River Belt.....	7.7	10.4	.....	.....	11.2	7.1	.....	.....
13. North Mississippi River Belt.....	12.2	13.6	10.3	24.1	.....	.....	9.8	11.4
14. Southwest Central region.....	11.7	12.0	.....	.....	12.8	7.8	.....	.....
15. Central region, plains and prairies.....	11.5	10.0	15.0	14.9	11.3	11.7	.....	.....
16. The Prairie region.....	10.7	11.5	.....	.....	.....	.....	8.0	6.3
17. Missouri River Belt.....	15.8	12.4	5.6	14.7	.....	.....	7.6	9.6
18. Region of the Western Plains.....	2.6	8.6	13.3	5.5	.....	.....	12.9	.....
19. Heavily-timbered region of the Northwest.....	8.2	6.6	.....	.....	.....	.....	9.5	6.3
20. Cordilleran region.....	9.4	7.2	.....	.....	.....	.....	8.1	10.6
21. Pacific Coast region.....	11.0	8.7	17.1	20.8	.....	.....	27.9	15.0



The mean age at death of those reported as dying of bronchitis during the census year was 24 years.

FIG. 77.—DEATHS FROM BRONCHITIS PER 1000 DEATHS FROM KNOWN CAUSES. IN 5 SHADES.



The following table and diagram show the varying proportions of deaths from bronchitis at different groups of age with distinction of sex. It will be seen that the mortality from this cause is greatest in infancy and early childhood. After the age of 10 years the proportion of deaths remains nearly stationary to the age of 55, after which it increases.

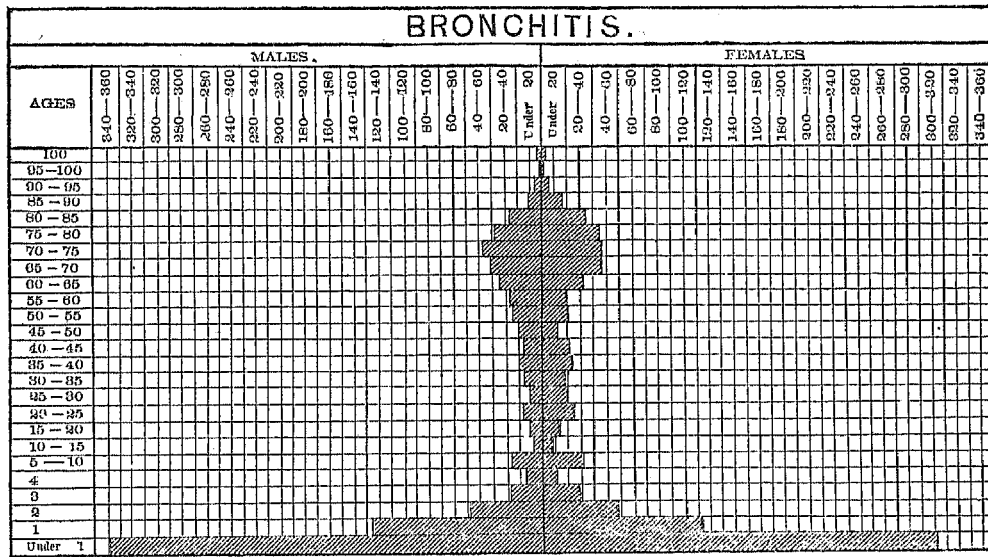
There is an excess in the proportion of female deaths as compared with male deaths between the ages of 5 and 10 and between 20 and 30, which may perhaps be in part due to the difference in clothing of the two sexes.

The tables and figures illustrating this disease should be compared with those for pneumonia, with which it is, no doubt, in many cases, confounded in the returns.

TABLE 85.—SHOWING THE NUMBER OF DEATHS FROM BRONCHITIS AT EACH GROUP OF AGES IN 1000 DEATHS REPORTED AS CAUSED BY THIS DISEASE.

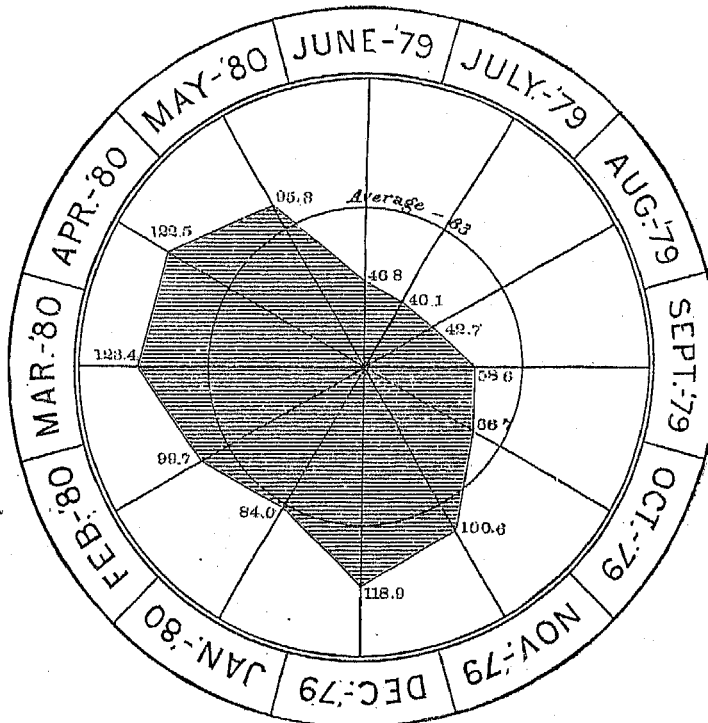
Ages.	Males.	Females.	Ages.	Males.	Females.	Ages.	Males.	Females.
Under 1 year .....	340.81	311.87	15-20 years.....	12.27	15.77	60-65 years.....	35.57	33.05
1 year.....	135.09	123.36	20-25 years.....	16.18	24.22	65-70 years.....	41.08	48.82
2 years.....	58.51	58.02	25-30 years.....	12.80	21.97	70-75 years.....	47.13	48.07
3 years.....	28.63	30.60	30-35 years.....	17.61	19.71	75-80 years.....	39.30	46.19
4 years.....	14.23	11.83	35-40 years.....	20.45	23.66	80-85 years.....	27.57	35.49
Total under 5 years..	586.88	535.67	40-45 years.....	15.83	21.22	85-90 years.....	11.20	17.27
5-10 years.....	26.50	31.54	45-50 years.....	21.52	14.08	90-95 years.....	5.65	7.13
10-15 years.....	9.43	9.95	50-55 years.....	24.54	22.72	95 and over.....	1.42	1.69
			55-60 years.....	27.03	21.78	Unknown.....	3.02	3.38

FIG. 78.—DEATHS FROM BRONCHITIS AT CERTAIN GROUPS OF AGES IN 1000 DEATHS CAUSED BY THIS DISEASE.



The following diagram shows, by months, for the 31 registration cities the proportion of deaths reported as due to bronchitis. The periods of the greatest number of deaths are in March and April and in December, the smallest proportions occurring from June to October, the general distribution being very much like that for pneumonia:

FIG. 79.—DEATHS FROM BRONCHITIS, BY MONTHS, IN 31 REGISTRATION CITIES.



## PLEURISY.

The total number of deaths reported as due to pleurisy during the census year was 1,958, of which 1,016 were of males and 942 were of females. Out of each 100,000 deaths from all causes it is reported as causing in 1880, 258; in 1870, 766; in 1860, 320; in 1850, 671.

In England and Wales during the 10 years 1870-'79, out of each 100,000 deaths from specified causes, pleurisy caused 226, and in 1880, 248. There is little difference in the proportion of deaths caused by pleurisy in the large cities and in the rural districts, or in males and females.

## MORTALITY AND VITAL STATISTICS.

It caused a higher proportion of deaths in the colored (3.7) than in the whites (2.7), and somewhat higher in the Irish (2.9) than in the Germans (2.6); but this difference is quite within the limits of probable error.

The mean age at death of those reported as dying of pleurisy during the census year was 42 years.

The following table shows by grand groups the distribution of deaths from this disease. The highest proportion of deaths from this cause is on the Gulf coast in the rural districts, in which it is for males 8.2 and for females 6.7.

TABLE 86.—SHOWING FOR RURAL AND CITIES, WITH DISTINCTION OF SEX, AND FOR WHITE AND COLORED, IRISH AND GERMAN PARENTAGE, THE PROPORTION OF DEATHS FROM PLEURISY IN 1000 DEATHS FROM KNOWN CAUSES.

Grand Groups.	RURAL.		CITIES.		White.	Colored.	Irish parentage.	German parentage.
	Male.	Female.	Male.	Female.				
Total.....	2.6	2.7	3.0	2.6	2.7	3.7	2.9	2.6
1. North Atlantic Coast region.....	2.6	2.8	3.1	2.6	.....	.....	3.4	1.5
2. Middle Atlantic Coast region.....	2.0	2.6	3.3	3.2	3.0	2.8	2.7	3.4
3. South Atlantic Coast region.....	4.7	4.6	3.5	6.7	5.2	4.5	.....	.....
4. Gulf Coast region.....	8.2	6.7	3.8	2.4	5.7	6.2	.....	.....
5. Northeastern Hills and Plateaus.....	2.0	2.0	3.2	2.4	.....	.....	3.1	.....
6. Central Appalachian region.....	2.1	2.8	1.2	.....	.....	.....	1.6	3.5
7. Region of the Great Northern Lakes.....	2.5	2.5	2.2	2.1	.....	.....	3.4	2.0
8. The Interior Plateau.....	3.3	2.7	3.2	2.1	2.7	4.1	3.5	4.1
9. Southern Central Appalachian region.....	3.6	4.3	.....	.....	3.6	5.0	.....	.....
10. The Ohio River Belt.....	1.2	1.9	2.1	1.2	1.5	2.3	2.4	1.7
11. Southern Interior Plateau.....	3.8	4.5	.....	.....	4.2	4.1	.....	.....
12. South Mississippi River Belt.....	3.9	2.0	.....	.....	1.9	4.0	.....	.....
13. North Mississippi River Belt.....	2.8	2.8	2.0	3.1	.....	.....	2.5	3.1
14. Southwest Central region.....	1.5	2.0	.....	.....	1.8	1.6	.....	.....
15. Central region, plains and prairies.....	2.4	1.7	1.9	0.7	2.0	1.9	.....	.....
16. The Prairie region.....	2.0	1.5	.....	.....	.....	.....	2.3	1.3
17. Missouri River Belt.....	1.8	2.3	5.6	3.6	.....	.....	2.5	1.7
18. Region of the Western Plains.....	3.0	5.2	6.9	.....	.....	.....	.....	.....
19. Heavily-timbered region of the Northwest.....	1.0	2.3	.....	.....	.....	.....	1.9	1.0
20. Cordilleran region.....	2.0	2.5	.....	.....	.....	.....	1.5	.....
21. Pacific Coast region.....	3.0	4.0	3.6	1.6	.....	.....	3.1	3.3

## DISEASES OF THE DIGESTIVE SYSTEM.

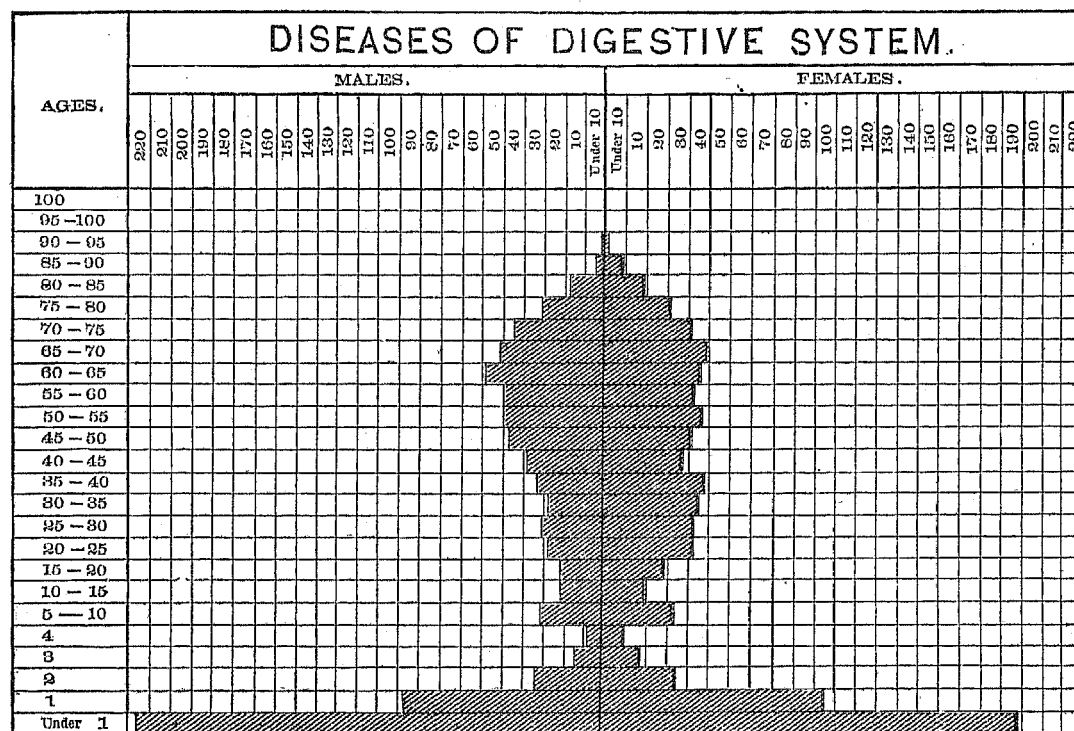
The total number of deaths reported as due to diseases of the digestive system in the United States during the census year was 32,836, of which 17,546 were of males and 15,290 of females. Out of each 100,000 deaths from all causes this class of diseases caused, in 1880, 4,338; in 1870, 4,589; in 1860, 4,606; in 1850, 4,096. In England and Wales for the 10 years 1870-79, diseases of this class caused in each 100,000 deaths from specified causes 4,572, and in the year 1880, 4,754.

The following table and diagram show the proportion of deaths reported as due to diseases of the digestive organs in relation to age, with distinction of sex. The greatest proportion of deaths occurs in infancy, and the least from 10 to 15 years of age, from which time it increases with advancing years. From the age of 20 to 40 the female mortality from this cause is greater than that of the male, while from 45 to 70 it is less. The excess of mortality from this cause in the colored population is almost entirely under 5 years of age, after which it is less than for the whites of corresponding ages:

TABLE 87.—SHOWING THE NUMBER OF DEATHS FROM DISEASES OF THE DIGESTIVE SYSTEM AT EACH GROUP OF AGES IN 1000 DEATHS REPORTED AS CAUSED BY THESE DISEASES.

Ages.	Males.	Females.	Ages.	Males.	Females.	Ages.	Males.	Females.
Under 1 year.....	227.0	197.7	15-20 years.....	23.2	29.8	60-65 years.....	59.7	46.3
1 year.....	98.9	104.6	20-25 years.....	29.5	43.5	65-70 years.....	52.1	50.3
2 years.....	35.4	34.6	25-30 years.....	32.9	43.8	70-75 years.....	45.5	41.6
3 years.....	15.4	17.6	30-35 years.....	29.3	44.4	75-80 years.....	32.8	32.9
4 years.....	9.7	11.8	35-40 years.....	34.3	47.4	80-85 years.....	18.8	19.7
Total under 5 years..	337.5	366.4	40-45 years.....	39.4	37.3	85-90 years.....	5.8	9.0
5-10 years.....	33.0	33.7	45-50 years.....	47.8	41.8	90-95 years.....	2.2	1.9
10-15 years.....	23.2	20.2	50-55 years.....	50.5	46.2	95 and over.....	0.7	0.9
			55-60 years.....	50.9	42.6	Unknown.....	4.8	4.6

FIG. 80.—DEATHS FROM DISEASES OF THE DIGESTIVE SYSTEM AT CERTAIN GROUPS OF AGES IN 1000 DEATHS CAUSED BY THESE DISEASES.



The following table shows the relations of the deaths reported as due to these diseases to certain groups of ages:

TABLE 88.—SHOWING FOR CERTAIN GROUPS OF AGES THE NUMBER OF DEATHS FROM DISEASES OF THE DIGESTIVE SYSTEM, AND THE PROPORTION OF DEATHS FROM THESE CAUSES PER 1,000,000 DEATHS AT THE CORRESPONDING AGE GROUPS, WITH DISTINCTION OF SEX, OF RURAL AND CITIES, AND, FOR CERTAIN REGIONS, OF COLOR AND PARENTAGE.

Deaths from diseases of the digestive system in—		DEATHS.				PROPORTION IN 1,000,000 DEATHS AT CERTAIN AGES.			
		Under 5.	5-15.	15-65.	65 and over.	Under 5.	5-15.	15-65.	65 and over.
The United States .....	{ M.	6,767	983	6,949	2,763	45,030	30,812	51,657	52,562
	{ F.	5,578	821	6,438	2,383	43,724	25,460	46,561	49,611
Rural .....	{ M.	5,269	815	5,047	2,305	47,907	30,446	48,421	51,433
	{ F.	4,355	672	4,811	1,973	46,645	24,704	43,655	50,550
Cities .....	{ M.	1,478	168	1,902	458	37,067	32,723	59,680	59,097
	{ F.	1,223	140	1,627	410	35,753	29,534	57,973	45,540
White in 10 Grand Groups .....	{ M.	2,964	491	3,330	1,399	43,264	37,088	53,070	56,743
	{ F.	2,415	405	3,187	1,196	41,359	31,875	48,991	51,889
Colored in 10 Grand Groups .....	{ M.	1,576	120	631	191	69,485	26,008	39,278	45,405
	{ F.	1,431	113	588	135	71,575	22,564	29,998	32,743
Irish parentage in 14 Grand Groups .....	{ M.	233	47	634	229	35,616	30,245	50,353	50,782
	{ F.	193	28	520	183	34,976	19,499	44,862	46,839
German parentage in 14 Grand Groups .....	{ M.	346	36	548	164	44,364	20,330	57,910	54,558
	{ F.	268	25	355	116	41,205	15,347	50,649	49,509

In the United States during the census year, in each 1000 deaths from specified causes the diseases of this class caused in males 47.12 and in females 44.02 deaths. This class of affections caused a slightly greater proportion of deaths in the large cities (46.1) than in the rural districts (45.4), and in those regions in which the distinctions of color and of Irish and German parentage were made, the diseases of this class caused a somewhat greater proportion in the colored (49.6) than in the white (46.8), and in those of German parentage (47.1) than in those of Irish parentage (43.8).

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TABLE 89.—SHOWING FOR RURAL AND CITIES, WITH DISTINCTION OF SEX, AND FOR WHITE AND COLORED, IRISH AND GERMAN PARENTAGE, THE PROPORTION OF DEATHS FROM DISEASES OF THE DIGESTIVE SYSTEM IN 1000 DEATHS FROM KNOWN CAUSES.

Grand Groups.	RURAL.		CITIES.		White.	Colored.	Irish parentage.	German parentage.
	Male.	Female.	Male.	Female.				
Total .....	47.0	43.8	47.4	44.7	46.8	49.6	43.8	47.1
1. North Atlantic Coast region .....	38.24	39.39	39.45	37.62			37.4	35.4
2. Middle Atlantic Coast region .....	49.06	43.59	48.44	45.01	47.0	43.7	43.5	40.9
3. South Atlantic Coast region .....	55.62	49.81	67.93	62.64	57.8	53.6		
4. Gulf Coast region .....	63.87	66.45	64.17	56.40	67.2	58.5		
5. Northeastern Hills and Plateaus .....	38.51	36.90	40.51	43.80			32.7	20.6
6. Central Appalachian region .....	40.01	36.33	27.23	28.26			36.7	38.8
7. Region of the Great Northern Lakes .....	44.89	42.52	40.83	40.43			46.5	48.8
8. The Interior Plateau .....	47.55	42.54	42.61	44.30	43.4	51.0	56.3	44.5
9. Southern Central Appalachian region .....	49.65	42.64			46.5	44.4		
10. The Ohio River Belt .....	38.52	34.63	49.27	42.69	39.5	34.9	56.8	45.2
11. Southern Interior Plateau .....	57.72	52.04			55.1	55.1		
12. South Mississippi River Belt .....	54.75	49.19			50.5	53.5		
13. North Mississippi River Belt .....	51.52	44.46	49.71	47.75			45.1	50.8
14. Southwest Central region .....	53.04	49.06			52.5	45.1		
15. Central region, plains and prairies .....	44.27	42.53	47.70	42.05	44.2	38.3		
16. The Prairie region .....	49.32	42.90					49.4	60.5
17. Missouri River Belt .....	39.45	42.93	39.55	25.74			38.3	36.0
18. Region of the Western Plains .....	45.08	54.40	31.25	22.10			38.9	21.1
19. Heavily-timbered region of the Northwest .....	40.04	35.78					45.7	52.7
20. Cordilleran region .....	38.42	42.14					44.4	45.9
21. Pacific Coast region .....	51.00	43.83	61.76	54.13			50.2	60.8

## PERITONITIS.

The total number of deaths reported as due to peritonitis during the census year was 3,304, of which 1,382 were of males and 1,922 of females. Out of each 100,000 deaths from all causes it caused, in 1880, 437 deaths; in 1870, 194; in 1860, 29; in 1850, 11. This apparent increase is probably entirely owing to the greater accuracy in the enumeration of the present census due to the supervision of physicians. A large part of the deaths of females reported as due to this cause should probably have been reported as owing to abortion or to diseases of the organs of generation.

In England and Wales for the 10 years 1870-79, in each 100,000 deaths from specified causes, peritonitis caused 388.7, and in 1880, 408.5 deaths. The proportion of deaths reported as due to this cause was much greater in the large cities (7.9) than in the rural districts (3.6); and in those regions where distinction of color and parentage were made, the proportion is much greater in the whites (4.9) than in the colored (2.1). For those of Irish parentage the proportion is 6.8, and for those of German parentage 6.4, being above the average for the white population.

The mean age at death of those reported as dying of peritonitis during the census year was 33 years.

The following table shows by grand groups the distribution of the deaths reported as due to this cause:

TABLE 90.—SHOWING FOR RURAL AND CITIES, WITH DISTINCTION OF SEX, AND FOR WHITE AND COLORED, IRISH AND GERMAN PARENTAGE, THE PROPORTION OF DEATHS FROM PERITONITIS IN 1000 DEATHS FROM KNOWN CAUSES.

Grand Groups.	RURAL.		CITIES.		White.	Colored.	Irish parentage.	German parentage.
	Male.	Female.	Male.	Female.				
Total .....	2.8	4.3	6.5	9.5	4.9	2.1	6.8	6.4
1. North Atlantic Coast region .....	4.4	6.7	6.8	10.2			7.7	6.1
2. Middle Atlantic Coast region .....	4.7	7.4	7.0	7.6	7.5	3.0	7.0	7.9
3. South Atlantic Coast region .....	0.5	2.3	2.3	2.2	2.1	1.1		
4. Gulf Coast region .....	2.4	4.9	4.5	6.4	4.9	3.4		
5. Northeastern Hills and Plateaus .....	4.7	0.0	6.4	10.9			5.2	5.1
6. Central Appalachian region .....	4.9	4.8	2.4	12.1			4.7	5.7
7. Region of the Great Northern Lakes .....	3.6	4.7	0.6	10.7			9.4	7.2
8. The Interior Plateau .....	3.5	4.6	6.3	11.9	6.2	2.5	9.2	6.6
9. Southern Central Appalachian region .....	1.3	2.9			2.4	1.3		
10. The Ohio River Belt .....	2.8	2.4	6.7	12.9	4.5	3.0	5.4	7.3
11. Southern Interior Plateau .....	1.0	1.8			1.7	1.1		
12. South Mississippi River Belt .....	0.8	2.0			1.0	1.6		
13. North Mississippi River Belt .....	3.1	4.7	7.7	11.3			1.7	5.1
14. Southwest Central region .....	1.5	4.4			3.1	2.2		
15. Central region, plains and prairies .....	3.0	4.4	3.1	8.5	3.8	3.6		
16. The Prairie region .....	2.8	4.7					2.9	4.5
17. Missouri River Belt .....	1.8	2.7	8.4					0.8
18. Region of the Western Plains .....	1.3	3.4	3.4					
19. Heavily-timbered region of the Northwest .....	2.1	4.8					3.8	4.2
20. Cordilleran region .....	2.7	4.6					6.3	
21. Pacific Coast region .....	3.4	6.4	6.2	11.7			11.9	9.3



## DISEASES OF THE URINARY SYSTEM AND OF THE MALE ORGANS OF GENERATION.

The total number of deaths reported as due to this class of diseases was 12,098, of which 8,358 were of males and 3,740 of females, giving a proportion for males of 22.44, and for females of 10.77 per 1000 deaths from specified causes.

The proportion of deaths from Bright's disease, calculus, and diseases of the kidney and bladder, is much greater in the male than in the female.

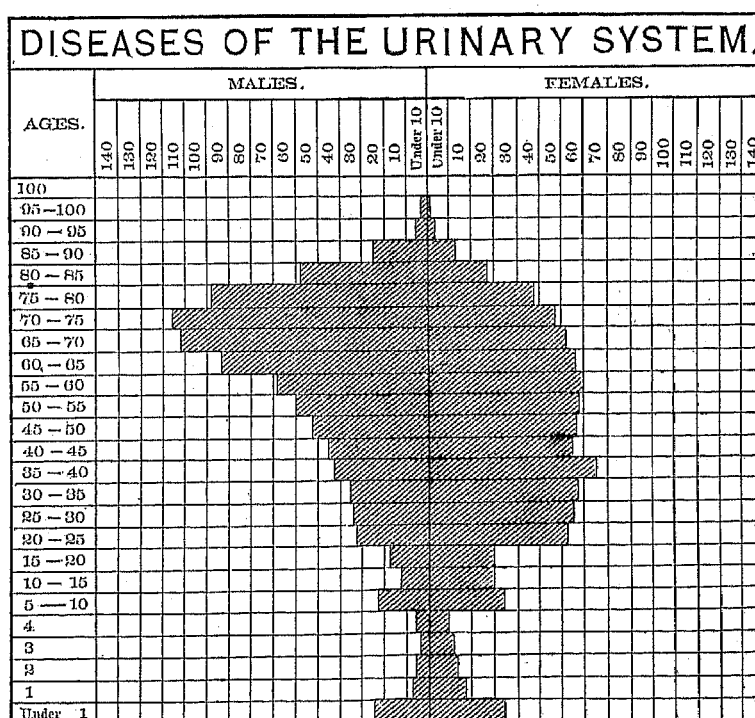
Up to the age of 65 years the proportion of deaths from these causes is greater in the cities than in the rural districts. Over 65 it is greatest in the latter regions in males only. In those parts of the country where the distinction is made between white and colored, Irish and German; the proportions are greater in the white than in the colored, and in the Irish than in the German.

The following table shows the relations of the deaths reported as due to those causes to certain groups of ages:

TABLE 91.—SHOWING FOR CERTAIN GROUPS OF AGES THE NUMBER OF DEATHS FROM DISEASES OF THE URINARY SYSTEM, AND THE PROPORTION OF DEATHS FROM THESE CAUSES PER 1,000,000 DEATHS AT THE CORRESPONDING AGE GROUPS, WITH DISTINCTION OF SEX, OF RURAL AND CITIES, AND, FOR CERTAIN REGIONS, OF COLOR AND PARENTAGE.

Deaths from diseases of the urinary system in—	DEATHS.				PROPORTION IN 1,000,000 DEATHS AT CERTAIN AGES.			
	Under 5.	5-15.	15-65.	65 and over.	Under 5.	5-15.	15-65.	65 and over.
The United States..... { M.	470	300	4,059	3,503	3,127	9,404	29,823	66,640
..... { F.	341	231	2,306	791	2,673	7,163	17,112	16,467
Rural..... { M.	264	177	2,552	3,014	2,391	6,612	24,484	67,253
..... { F.	173	141	1,244	501	1,853	5,183	11,288	12,836
Cities..... { M.	208	123	1,507	489	5,166	28,958	47,286	63,097
..... { F.	168	90	1,122	290	4,911	17,839	39,079	32,212
White in 10 Grand Groups..... { M.	275	151	2,161	1,585	4,014	11,683	34,088	64,287
..... { F.	212	117	1,350	464	3,631	9,208	20,891	20,131
Colored in 10 Grand Groups..... { M.	30	21	343	264	1,720	4,656	21,662	62,842
..... { F.	24	22	155	57	1,200	4,393	7,908	13,825
Irish parentage in 14 Grand Groups..... { M.	28	19	488	253	4,280	12,227	38,758	62,732
..... { F.	29	20	422	83	5,256	13,028	36,408	21,244
German parentage in 14 Grand Groups..... { M.	28	25	320	167	3,590	14,535	34,767	55,556
..... { F.	25	10	183	48	3,844	6,189	26,100	20,487

FIG. 81.—DEATHS FROM DISEASES OF THE URINARY SYSTEM AT CERTAIN GROUPS OF AGES IN 1000 DEATHS CAUSED BY THESE DISEASES.



## MORTALITY AND VITAL STATISTICS.

Figure 81 shows the proportion of deaths reported as due to diseases of the urinary system at different ages. In males the proportion steadily increases from the age of 15 to that of 75, while in females it remains nearly stationary from the age of 20 to that of 75. From the age of birth up to 55 the proportion of mortality from this cause is greater in the female than in the male. Above 55 the reverse is the case.

TABLE 92.—SHOWING THE NUMBER OF DEATHS FROM DISEASES OF THE URINARY SYSTEM AT EACH GROUP OF AGES IN 1000 DEATHS REPORTED AS CAUSED BY THESE DISEASES.

Ages.	Males.	Females.	Ages.	Males.	Females.	Ages.	Males.	Females.
Under 1 year .....	26.52	34.86	15-20 years .....	19.80	30.30	60-65 years .....	93.37	67.85
1 year .....	9.36	18.77	20-25 years .....	31.20	63.56	65-70 years .....	111.02	61.14
2 years .....	8.16	14.21	25-30 years .....	32.77	66.24	70-75 years .....	117.98	57.66
3 years .....	5.40	13.14	30-35 years .....	36.85	68.38	75-80 years .....	97.70	49.61
4 years .....	6.93	10.46	35-40 years .....	43.81	75.09	80-85 years .....	59.89	25.48
Total under 5 years..	56.41	91.57	40-45 years .....	48.01	64.63	85-90 years .....	25.92	12.60
5-10 years .....	22.68	34.86	45-50 years .....	51.13	68.11	90-95 years .....	5.64	3.75
10-15 years .....	13.32	27.69	50-55 years .....	60.73	69.99	95 and over .....	2.28	1.88
			55-60 years .....	69.49	60.34	Unknown .....	3.12	2.95

TABLE 93.—SHOWING FOR RURAL AND CITIES, WITH DISTINCTION OF SEX, AND FOR WHITE AND COLORED, IRISH AND GERMAN PARENTAGE, THE PROPORTION OF DEATHS FROM DISEASES OF THE URINARY SYSTEM IN 1000 DEATHS FROM KNOWN CAUSES.

Grand Groups.	RURAL.		CITIES.		White.	Colored.	Irish parentage.	German parentage.
	Male.	Female.	Male.	Female.				
Total .....	20.9	7.6	27.4	21.8	19.2	9.6	28.4	20.6
1. North Atlantic Coast region .....	34.3	13.5	29.6	19.6			22.2	26.1
2. Middle Atlantic Coast region .....	27.1	16.0	38.1	32.8	33.5	16.8	42.5	34.4
3. South Atlantic Coast region .....	15.6	4.8	19.0	3.3	12.3	9.0		
4. Gulf Coast region .....	19.1	7.1	20.6	15.2	16.6	18.4		
5. Northeastern Hills and Plateaus .....	37.2	11.3	21.3	32.8			17.0	41.2
6. Central Appalachian region .....	24.0	11.3	19.8	21.5			18.2	28.7
7. Region of the Great Northern Lakes .....	26.2	8.7	18.5	13.9			21.1	12.1
8. The Interior Plateau .....	27.6	12.3	23.1	15.4	21.6	10.1	28.9	19.1
9. Southern Central Appalachian region .....	18.9	4.0			12.2	8.5		
10. The Ohio River Belt .....	20.7	6.6	20.1	13.9	14.9	12.7	22.6	14.7
11. Southern Interior Plateau .....	14.3	3.8			11.0	7.5		
12. South Mississippi River Belt .....	12.7	0.3			14.0	6.0		
13. North Mississippi River Belt .....	17.0	6.1	11.8	10.2			22.9	10.0
14. Southwest Central region .....	10.8	4.2			7.3	9.0		
15. Central region, plains and prairies .....	19.1	5.8	17.1	7.3	13.3	6.9		
16. The Prairie region .....	19.7	5.0					18.8	16.8
17. Missouri River Belt .....	13.9	5.5	5.6	8.6			12.7	13.2
18. Region of the Western Plains .....	11.9	6.3	17.3	11.0			25.9	
19. Heavily-timbered region of the Northwest .....	23.0	6.1					22.8	15.8
20. Cordilleran region .....	13.7	4.6					7.9	10.6
21. Pacific Coast region .....	19.4	8.1	17.8	9.6			15.1	17.1

## DISEASES OF THE FEMALE ORGANS OF GENERATION.

The total number of deaths reported as due to the female organs of generation is 2,454, being 7.06 per 1000 deaths from specified causes. The proportion of deaths reported as due to these causes is greater in the rural districts than in the large cities, much greater among the colored than the whites, and among the Germans than among the Irish.

# CAUSES OF DEATH.

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These relations, with certain distinctions of age, are shown in the following table:

TABLE 94.—SHOWING FOR CERTAIN GROUPS OF AGES THE NUMBER OF DEATHS FROM DISEASES OF THE FEMALE ORGANS OF GENERATION, AND THE PROPORTION OF DEATHS FROM THESE CAUSES PER 1,000,000 DEATHS AT THE CORRESPONDING AGE GROUPS, WITH DISTINCTION OF RURAL AND CITIES, AND, FOR CERTAIN REGIONS, OF COLOR AND PARENTAGE.

Deaths from diseases of the female organs of generation in—	DEATHS.				PROPORTION IN 1,000,000 DEATHS AT CERTAIN AGES.			
	Under 5.	5-15.	15-65.	65 and over.	Under 5.	5-15.	15-65.	65 and over.
The United States.....	0	29	2,227	174	71	899	10,106	3,022
Rural.....	8	29	1,941	140	85	1,066	17,013	3,587
Cities.....	1	.....	289	34	29	.....	10,101	3,777
White in 10 Grand Groups.....	5	12	945	78	80	944	14,527	3,384
Colored in 10 Grand Groups.....	3	8	456	29	150	1,597	23,264	7,034
Irish parentage in 14 Grand Groups.....	1	.....	77	6	181	.....	6,043	1,536
German parentage in 14 Grand Groups.....	.....	1	95	4	.....	614	13,554	1,707

Figure 68, *ante*, shows the proportions of deaths from diseases of the female organs of generation and from child-birth and abortion in relation to the ages of death.

TABLE 95.—SHOWING THE NUMBER OF DEATHS FROM DISEASES OF THE FEMALE ORGANS OF GENERATION AT EACH GROUP OF AGES IN 1000 DEATHS REPORTED AS CAUSED BY THESE DISEASES.

Ages.	Females.	Ages.	Females.	Ages.	Females.
Under 1 year.....	.....	15-20 years.....	63.96	60-65 years.....	43.46
1 year.....	.....	20-25 years.....	94.71	65-70 years.....	25.42
2 years.....	1.04	25-30 years.....	113.16	70-75 years.....	21.73
3 years.....	1.04	30-35 years.....	109.47	75-80 years.....	15.17
4 years.....	0.41	35-40 years.....	135.30	80-85 years.....	4.02
Total under 5 years.....	3.69	40-45 years.....	120.13	85-90 years.....	2.37
5-10 years.....	0.82	45-50 years.....	109.06	90-95 years.....	0.41
10-15 years.....	11.07	50-55 years.....	75.44	95 and over.....	0.82
		55-60 years.....	48.38	Unknown.....	6.15

The proportion of deaths from diseases of the female organs of generation is greatest from 35 to 45 years of age.

## DISEASES OF THE BONES AND JOINTS.

The total number of deaths reported as due to diseases of the bones and joints is 2,104, of which 1,215 occurred in males and 889 in females, giving a proportion for males of 3.26 and for females of 2.56 per 1000 deaths from specified causes. The proportion of deaths from this class of causes is almost precisely the same in the large cities and in the rural districts as regards the total number of cases, but there is some difference as to the proportions occurring at various groups of ages.

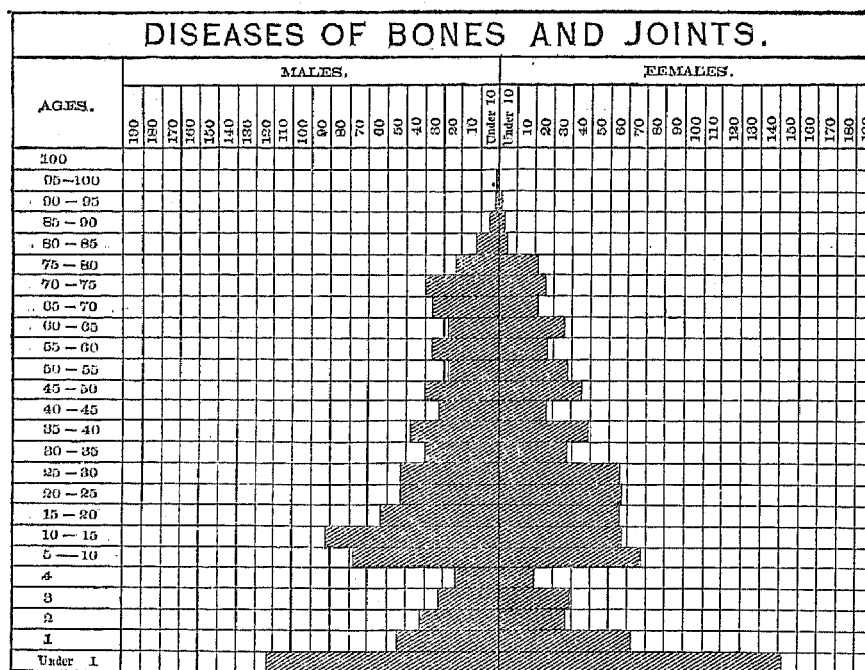
The following table and diagram show the proportion of deaths reported as due to diseases of the bones and joints at different ages, with distinction of sex. The proportion of deaths from these causes is greatest during the first 30 years of life, and is greater in the female than in the male for these years, while in more advanced life the reverse is the case:

TABLE 96.—SHOWING THE NUMBER OF DEATHS FROM DISEASES OF THE BONES AND JOINTS AT EACH GROUP OF AGES IN 1000 DEATHS REPORTED AS CAUSED BY THESE DISEASES.

Ages.	Males.	Females.	Ages.	Males.	Females.	Ages.	Males.	Females.
Under 1.....	124.59	152.37	15-20 years.....	65.13	64.33	60-65 years.....	28.05	30.12
1 year.....	55.28	71.11	20-25 years.....	55.28	65.46	65-70 years.....	35.48	22.57
2 years.....	42.90	34.99	25-30 years.....	55.23	63.21	70-75 years.....	40.43	23.70
3 years.....	35.43	33.37	30-35 years.....	40.43	37.25	75-80 years.....	23.10	22.57
4 years.....	21.45	21.44	35-40 years.....	47.85	49.66	80-85 years.....	12.33	7.90
Total under 5 years..	279.70	318.28	40-45 years.....	33.00	25.96	85-90 years.....	4.95	5.64
5-10 years.....	79.21	70.01	45-50 years.....	40.43	46.28	90-95 years.....	1.65	1.13
10-15 years.....	91.58	66.59	50-55 years.....	29.70	38.37	95 and over.....	0.83	.....
			55-60 years.....	35.43	25.96	Unknown.....	2.48	3.39

## MORTALITY AND VITAL STATISTICS.

FIG. 82.—DEATHS FROM DISEASES OF THE BONES AND JOINTS AT CERTAIN GROUPS OF AGES IN 1000 DEATHS CAUSED BY THESE DISEASES.



The following table shows the relations of deaths from this class of causes at certain groups of ages to color and parentage. It will be seen that at all ages the proportion is greater in whites than in the colored, and that up to the age of 65 the proportion is greater in those of Irish parentage than in those of German parentage:

TABLE 97.—SHOWING FOR CERTAIN GROUPS OF AGES THE NUMBER OF DEATHS FROM DISEASES OF THE BONES AND JOINTS, AND THE PROPORTION OF DEATHS FROM THESE CAUSES PER 1,000,000 DEATHS AT THE CORRESPONDING AGE GROUPS, WITH DISTINCTION OF SEX, OF RURAL AND CITIES, AND, FOR CERTAIN REGIONS, OF COLOR AND PARENTAGE.

Deaths from diseases of the bones and joints in—		DEATHS.				PROPORTION IN 1,000,000 DEATHS AT CERTAIN AGES.			
		Under 5.	5-15.	15-65.	65 and over.	Under 5.	5-15.	15-65.	65 and over.
The United States .....	{ M.	339	207	522	144	2,255	6,488	3,835	2,739
	{ F.	282	129	401	74	2,211	4,000	2,900	1,541
Rural .....	{ M.	270	188	406	125	2,446	5,155	3,895	2,789
	{ F.	223	84	314	61	2,388	3,088	2,849	1,563
Cities .....	{ M.	69	69	116	19	1,730	13,440	3,630	2,452
	{ F.	59	45	87	13	1,725	8,920	3,100	1,444
White in 10 Grand Groups .....	{ M.	175	108	256	74	2,554	7,969	4,038	3,001
	{ F.	152	60	176	39	2,603	4,722	2,600	1,692
Colored in 10 Grand Groups .....	{ M.	36	13	50	12	1,587	2,882	3,112	2,856
	{ F.	22	13	47	2	1,100	2,596	2,398	485
Irish parentage in 14 Grand Groups .....	{ M.	14	15	47	8	2,140	9,653	3,733	1,984
	{ F.	10	11	40	4	1,812	7,660	3,450	1,024
German parentage in 14 Grand Groups .....	{ M.	11	12	26	10	1,410	6,977	2,748	3,327
	{ F.	11	8	16	6	1,691	4,911	2,283	2,561

## ACCIDENTS AND INJURIES.

The total number of deaths reported as due to accidents and injuries was 35,901, of which 26,283 were of males and 9,618 of females. They caused 47.4 of each 1000 deaths from all causes, as against 47.0 in 1870, 49.5 in 1860, and 37.1 in 1850. Out of each 1000 deaths from known causes in the large cities they caused 40.8, and in the rest of the country 52.4. In that part of the country in which the color distinction is made they caused among the colored 67.6 and among the whites 43.8 per 1000 from all deaths from specified causes. In that part of the country

in which the distinctions of parentage were made they caused for persons of Irish parentage 61.0 and for those of German parentage 52.5 per 1000 deaths from known causes. The following table shows by grand groups these and other relations:

TABLE 98.—SHOWING FOR RURAL AND CITIES, WITH DISTINCTION OF SEX, AND FOR WHITE AND COLORED, IRISH AND GERMAN PARENTAGE, THE PROPORTION OF DEATHS FROM ACCIDENTS AND INJURIES IN 1000 DEATHS FROM KNOWN CAUSES.

Grand Groups.	RURAL.		CITIES.		White.	Colored.	Irish parentage.	German parentage.
	Male.	Female.	Male.	Female.				
Total .....	74.2	29.3	58.0	21.0	43.8	67.0	61.0	52.5
1. North Atlantic Coast region .....	61.5	17.8	52.3	17.8	.....	.....	40.0	57.0
2. Middle Atlantic Coast region .....	64.8	26.3	51.8	24.1	40.2	44.0	46.7	41.8
3. South Atlantic Coast region .....	78.1	45.9	44.1	14.5	40.9	71.3	.....	.....
4. Gulf Coast region .....	90.9	43.0	44.5	23.2	47.5	67.6	.....	.....
5. Northeastern Hills and Plateaus .....	63.3	21.3	54.3	14.0	.....	.....	50.5	51.5
6. Central Appalachian region .....	85.0	24.4	70.7	13.4	.....	.....	125.5	70.5
7. Region of the Great Northern Lakes .....	85.7	25.3	63.5	17.9	.....	.....	83.2	46.4
8. The Interior Plateau .....	68.9	31.4	61.1	22.2	46.4	56.6	60.8	57.5
9. Southern Central Appalachian region .....	69.1	32.4	.....	.....	40.0	62.7	.....	.....
10. The Ohio River Belt .....	68.5	24.0	58.6	20.2	45.3	40.0	63.5	50.1
11. Southern Interior Plateau .....	77.1	48.6	.....	.....	42.0	78.2	.....	.....
12. South Mississippi River Belt .....	88.2	45.9	.....	.....	43.2	59.0	.....	.....
13. North Mississippi River Belt .....	71.1	24.7	62.4	19.3	.....	.....	72.3	61.2
14. Southwest Central region .....	73.5	33.0	.....	.....	47.2	83.9	.....	.....
15. Central region, plains and prairies .....	61.5	24.5	71.2	19.0	41.2	56.7	.....	.....
16. The Prairie region .....	68.4	22.9	.....	.....	.....	.....	71.3	56.4
17. Missouri River Belt .....	60.3	22.5	70.1	40.4	.....	.....	71.0	49.2
18. Region of the Western Plains .....	193.9	28.3	48.0	16.5	.....	.....	155.8	49.2
19. Heavily-timbered region of the Northwest .....	84.3	22.5	.....	.....	.....	.....	89.5	72.8
20. Cordilleran region .....	167.0	34.4	.....	.....	.....	.....	160.3	151.9
21. Pacific Coast region .....	146.7	42.0	92.1	29.4	.....	.....	83.7	102.9

Of each 1000 deaths reported as due to accidents there were in males 174.33, and in females 388.64 cases under 5 years of age.

Of the special causes reported as due to accidents and injuries the most important are burns and scalds, drowning, gunshot wounds, homicides, railroad accidents, suffocation, and suicide. The total number of deaths reported as due to burns and scalds is 4,785, of which 1,864 were of males and 2,921 of females. This caused in each 100,000 deaths from all causes 632 deaths, as against 689 in 1870, 1,082 in 1860, and 635 in 1850.

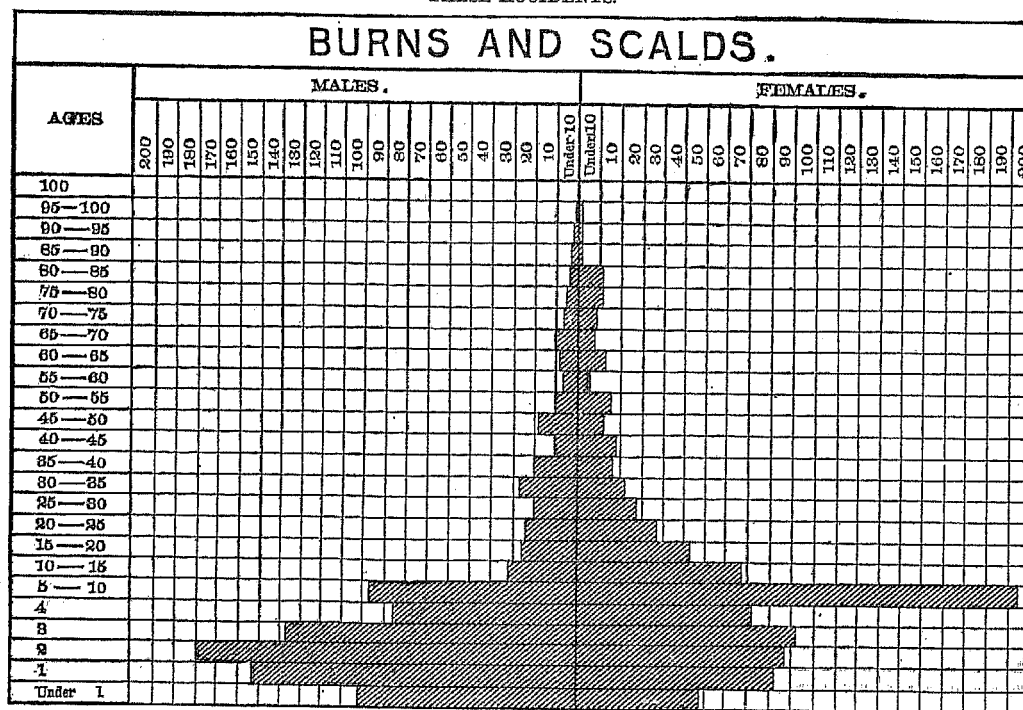
The following table and diagram show the proportion of deaths reported as due to burns and scalds in relation to age, with distinction of sex. The great excess of deaths from these causes in infancy, the excess of deaths of males between the ages of 1 and 4, and the marked excess of deaths of females from the age of 5 to 30, are noteworthy, the explanation of the latter peculiarity being probably the difference in dress of the two sexes, and the fact that the males are less exposed to danger from the ordinary household modes of heating and cooking:

TABLE 99.—SHOWING THE NUMBER OF DEATHS FROM BURNS AND SCALDS AT EACH GROUP OF AGES IN 1000 DEATHS REPORTED AS CAUSED BY THESE ACCIDENTS.

Ages.	Males.	Females.	Ages.	Males.	Females.	Ages.	Males.	Females.
Under 1 year .....	103.39	59.81	15-20 years .....	25.31	55.60	60-65 years .....	8.62	14.78
1 year .....	155.09	92.47	20-25 years .....	24.77	38.50	65-70 years .....	10.77	8.25
2 years .....	180.94	97.28	25-30 years .....	20.46	23.53	70-75 years .....	7.00	9.23
3 years .....	137.32	103.13	30-35 years .....	26.39	22.00	75-80 years .....	5.39	11.34
4 years .....	86.70	82.85	35-40 years .....	20.46	18.56	80-85 years .....	4.31	11.69
Total under 5 years ..	663.44	435.54	40-45 years .....	10.23	19.25	85-90 years .....	3.23	2.41
5-10 years .....	96.93	206.94	45-50 years .....	18.85	11.00	90-95 years .....	2.15	2.06
10-15 years .....	32.85	79.06	50-55 years .....	10.77	15.13	95 and over .....	1.62	2.75
			55-60 years .....	6.46	7.22	Unknown .....	3.77	4.13



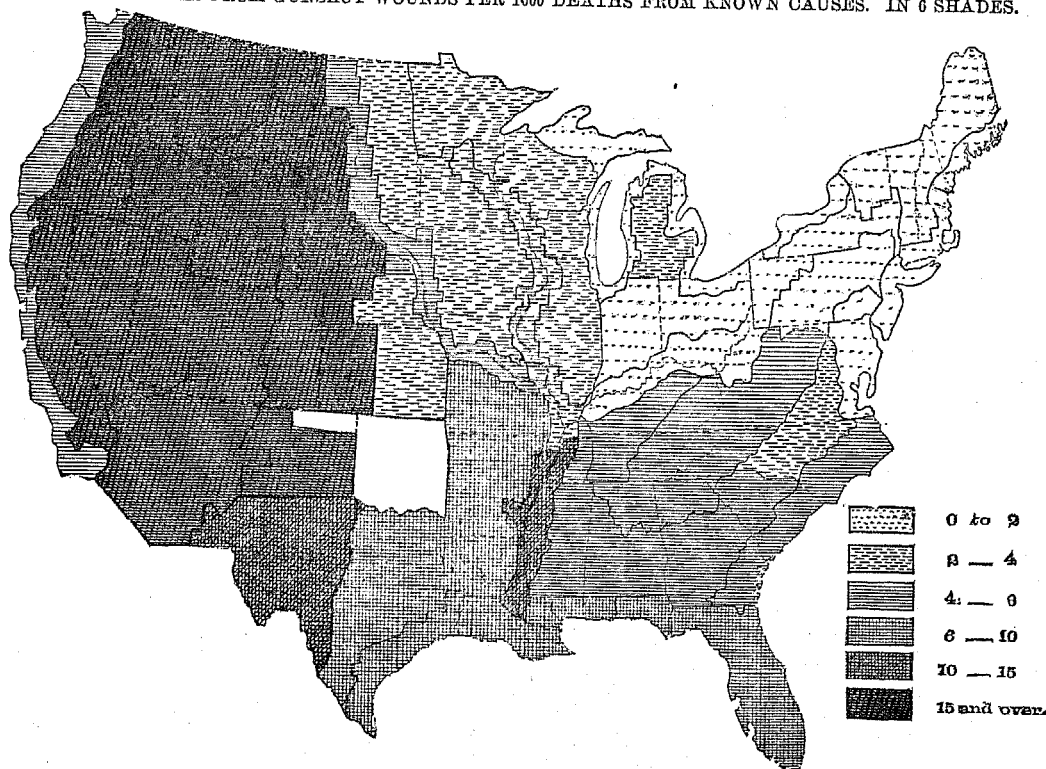
FIG. 83.—DEATHS FROM SCALDS AND BURNS AT CERTAIN GROUPS OF AGES IN 1000 DEATHS CAUSED BY THESE ACCIDENTS.



The total number of deaths reported as due to gunshot wounds was 2,287, of which 2,078 were of males and 209 of females. The proportion in each 100,000 deaths from all causes was 302, against 197 in 1870 and 188 in 1860.

The following cartogram shows the geographical distribution of deaths reported as due to gunshot wounds. It will be seen that they were most frequent in the southwestern and southern states, especially on the Western Plains and Prairies, the Cordilleran region, and the Southern Mississippi River region, and comparatively few on the North and Middle Atlantic coast regions and the Northeastern Plateau:

FIG. 84.—DEATHS FROM GUNSHOT WOUNDS PER 1000 DEATHS FROM KNOWN CAUSES. IN 6 SHADES.



#### SUICIDE.

The total number of deaths reported as due to suicide during the census year was 2,511, of which number 2,014 were of males, and 497 of females. In each 100,000 deaths from specified causes, 331 are reported as due to suicide, as against 273 in 1870, and 253 in 1860.

# CAUSES OF DEATH.

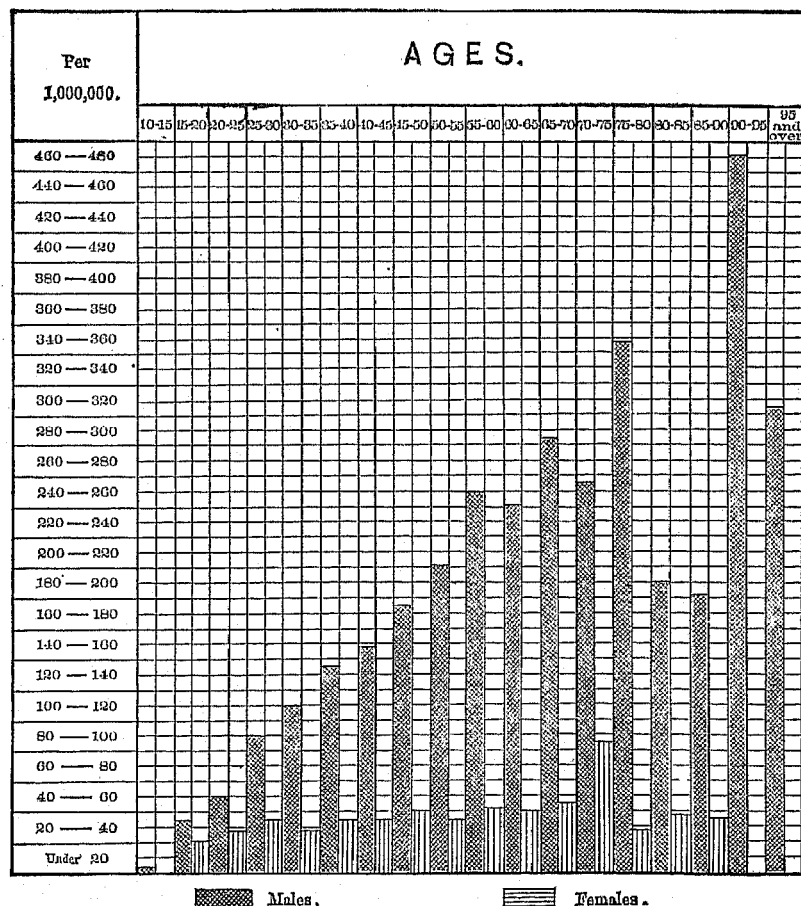
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The following table and diagram show the relations of suicide, as a cause of death, to sex and age, stated in proportions of the living population, from which it will be seen that there is a pretty regular increase in the proportion of the number of suicides to the living population with increase of age. The absolute number of suicides is greater at the earlier ages, as will be seen by fig. 86, showing the proportion of deaths from suicide occurring at certain ages, in 1000 deaths reported as due to this cause. It will be observed that the greater number of female suicides in any decade occur between the ages of 20 and 30, while the maximum number of cases of male suicides occur at more advanced ages:

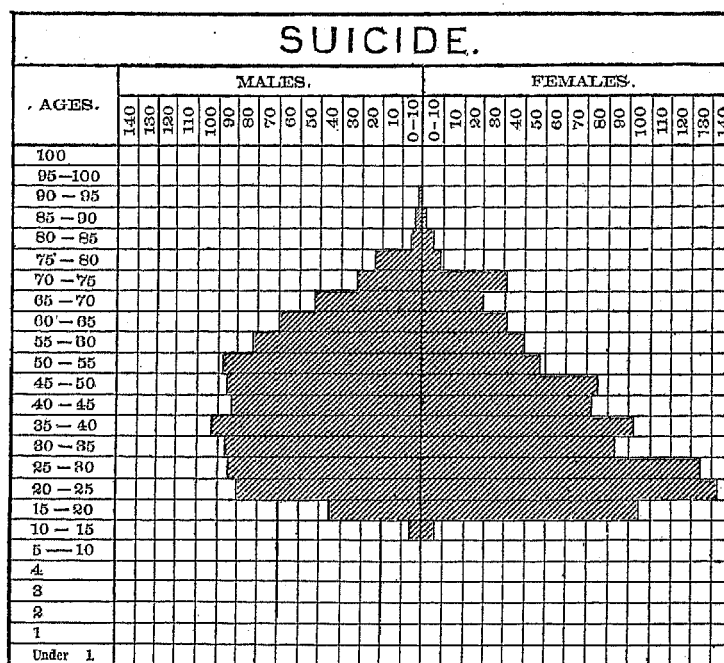
TABLE 100.—SHOWING THE NUMBER OF SUICIDES PER 1,000,000 OF LIVING POPULATION, AT CERTAIN GROUPS OF AGES, WITH DISTINCTION OF SEX.

Ages.	POPULATION.			DEATHS FROM SUICIDE.			PER 1,000,000 OF LIVING POPULATION AT CORRESPONDING AGES.		
	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.
5-10 years .....	6,479,660	3,275,131	3,204,529	3	2	1	0.46	0.61	0.31
10-15 years .....	5,715,180	2,907,481	2,807,705	16	12	4	2.79	4.12	1.42
15-20 years .....	5,011,415	2,476,088	2,535,327	141	89	52	28.13	35.94	20.51
20-25 years .....	5,087,772	2,554,684	2,533,088	250	180	70	49.13	70.45	27.03
25-30 years .....	4,089,621	2,109,741	1,979,880	256	189	67	62.73	89.53	33.99
30-35 years .....	3,368,943	1,744,308	1,624,635	238	192	46	70.64	110.07	28.31
35-40 years .....	3,000,419	1,527,159	1,473,260	250	209	50	86.32	136.85	33.93
40-45 years .....	2,468,811	1,243,773	1,225,038	227	186	41	91.94	149.54	33.46
45-50 years .....	2,089,445	1,078,695	1,010,750	230	188	42	110.07	174.28	41.55
50-55 years .....	1,839,883	906,702	873,181	224	195	29	121.74	201.71	33.21
55-60 years .....	1,271,434	674,927	596,507	194	169	25	152.58	259.89	41.91
60-65 years .....	1,104,219	584,858	519,361	162	141	21	146.71	241.08	40.43
65-70 years .....	725,870	379,498	346,378	123	108	15	169.45	284.58	48.30
70-75 years .....	495,442	250,001	245,441	85	64	21	171.56	255.90	85.56
75-80 years .....	281,065	138,601	142,464	52	48	4	185.01	340.31	28.07
80-85 years .....	146,362	67,941	78,421	16	18	3	109.31	191.34	38.25
85-90 years .....	49,835	21,908	27,927	5	4	1	100.33	182.58	35.80
90-95 years .....	16,100	6,351	9,749	3	3	.....	186.33	472.36	.....
95 and over .....	8,779	3,264	5,515	1	1	.....	113.90	306.37	.....

FIG. 85.—PROPORTION PER 1,000,000 SUICIDES AT CERTAIN AGES TO POPULATION OF CORRESPONDING AGES, WITH DISTINCTION OF SEX.



## MORTALITY AND VITAL STATISTICS.

FIG. 86.—DEATHS FROM SUICIDE AT CERTAIN GROUPS OF AGES IN 1000  
DEATHS DUE TO THIS CAUSE.

The following table shows, by grand groups, the distribution of deaths reported as due to suicide, with distinction of the large cities, in proportion to the living population. According to this table, suicides are about twice as frequent, in proportion to the living population, in the large cities as in the smaller towns and rural districts. It should be remembered, however, that the returns from the large cities are more complete and accurate than the others, so that the difference is not so great as these figures would indicate:

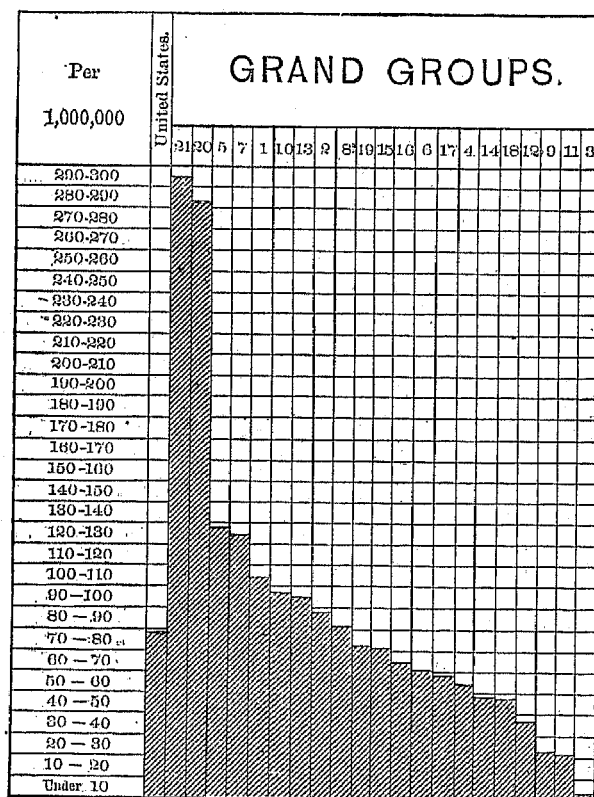
TABLE 101.—SHOWING THE NUMBER OF DEATHS FROM SUICIDE IN THE UNITED STATES AND IN GRAND GROUPS, IN 1,000,000 OF LIVING POPULATION, IN CITIES AND RURAL DISTRICTS, WITH DISTINCTION OF SEX.

United States and Grand Groups.	POPULATION.			DEATHS FROM SUICIDE.			PER 1,000,000 OF LIVING POPULATION.		
	Total.	Cities.	Rural.	Total.	Cities.	Rural.	Total.	Cities.	Rural.
Total .....	50,155,783	7,791,040	42,364,734	2,511	672	1,839	50.06	86.25	43.40
The United States .....	{ M. 25,518,820 F. 24,636,963	{ 3,823,020 3,968,023	{ 21,695,704 20,668,940	{ 2,014 497	{ 528 144	{ 1,486 353	{ 78.92 20.17	{ 138.11 36.29	{ 68.49 17.07
1. North Atlantic Coast region .....	{ M. 1,265,273 F. 1,351,597	{ 363,585 405,523	{ 901,688 946,074	{ 135 41	{ 38 12	{ 97 29	{ 106.69 30.33	{ 104.51 29.50	{ 107.57 30.65
2. Middle Atlantic Coast region .....	{ M. 2,150,337 F. 2,225,798	{ 1,255,135 1,338,800	{ 895,202 886,998	{ 190 61	{ 124 52	{ 66 9	{ 88.35 27.40	{ 98.79 38.84	{ 73.72 10.14
3. South Atlantic Coast region .....	{ M. 430,051 F. 444,435	{ 22,535 27,399	{ 408,066 417,036	{ 8 4	{ ..... 1	{ 8 3	{ 18.57 9.00	{ ..... 30.49	{ 10.60 7.19
4. Gulf Coast region .....	{ M. 528,387 F. 527,647	{ 100,892 115,198	{ 427,495 412,449	{ 29 7	{ 13 5	{ 16 2	{ 54.88 13.26	{ 128.85 43.40	{ 37.42 4.84
5. Northeastern Hills and Plateaus .....	{ M. 831,940 F. 837,289	{ 49,073 51,293	{ 782,867 786,056	{ 108 17	{ 9 .....	{ 99 17	{ 129.81 20.30	{ 183.40 .....	{ 126.45 21.62
6. Central Appalachian region .....	{ M. 1,178,833 F. 1,165,256	{ 47,935 48,946	{ 1,130,898 1,116,310	{ 73 19	{ 3 .....	{ 70 19	{ 61.92 16.30	{ 62.58 .....	{ 61.89 17.02
7. Region of the Great Northern Lakes .....	{ M. 1,560,867 F. 1,488,535	{ 595,643 594,252	{ 965,224 894,283	{ 198 43	{ 97 25	{ 101 18	{ 126.85 28.88	{ 162.84 42.06	{ 104.63 20.12
8. The Interior Plateau .....	{ M. 2,821,388 F. 2,893,295	{ 609,116 719,300	{ 2,152,272 2,173,995	{ 233 44	{ 83 12	{ 150 32	{ 82.58 15.20	{ 124.04 16.68	{ 69.09 14.71
9. Southern Central Appalachian region .....	{ M. 1,342,115 F. 1,355,843	{ ..... .....	{ 1,342,115 1,355,843	{ 31 14	{ ..... .....	{ 31 14	{ 23.09 10.32	{ ..... .....	{ 23.09 10.32
10. The Ohio River Belt .....	{ M. 1,227,333 F. 1,213,066	{ 203,443 214,132	{ 1,023,890 998,874	{ 121 35	{ 41 13	{ 80 25	{ 98.58 31.32	{ 201.53 60.71	{ 78.13 25.02
11. Southern Interior Plateau .....	{ M. 1,795,208 F. 1,830,337	{ ..... .....	{ 1,795,208 1,830,337	{ 39 12	{ ..... .....	{ 39 12	{ 21.72 6.55	{ ..... .....	{ 21.72 6.55

TABLE 101.—SHOWING THE NUMBER OF DEATHS FROM SUICIDE IN THE UNITED STATES AND IN GRAND GROUPS, IN 1,000,000 OF LIVING POPULATION, IN CITIES AND RURAL DISTRICTS, WITH DISTINCTION OF SEX—Continued.

United States and Grand Groups.		POPULATION.			DEATHS FROM SUICIDE.			PER 1,000,000 OF LIVING POPULATION.		
		Total.	Cities.	Rural.	Total.	Cities.	Rural.	Total.	Cities.	Rural.
12. South Mississippi River Belt.....	{ M.	363, 673	.....	363, 673	13	.....	13	35.74	.....	35.74
	{ F.	346, 577	.....	346, 577	2	.....	2	5.77	.....	5.77
13. North Mississippi River Belt.....	{ M.	1, 033, 633	227, 172	806, 461	99	34	65	95.77	149.66	80.50
	{ F.	957, 284	211, 700	745, 578	21	5	16	21.03	23.61	21.45
14. Southwest Central region.....	{ M.	1, 523, 961	.....	1, 523, 961	74	.....	74	48.55	.....	48.55
	{ F.	1, 408, 715	.....	1, 408, 715	19	.....	19	13.48	.....	13.48
15. Central region, plains and prairies.....	{ M.	2, 234, 868	84, 184	2, 150, 184	160	14	146	71.00	166.30	67.90
	{ F.	2, 169, 294	85, 869	2, 083, 425	35	1	34	16.13	11.64	16.31
16. The Prairie region.....	{ M.	2, 997, 609	.....	2, 997, 609	195	.....	195	65.05	.....	65.05
	{ F.	2, 724, 227	.....	2, 724, 227	59	.....	59	21.65	.....	21.65
17. Missouri River Belt.....	{ M.	448, 108	31, 999	416, 109	26	8	23	58.02	93.75	55.27
	{ F.	387, 586	23, 786	363, 800	4	1	3	10.32	42.04	8.24
18. Region of the Western Plains.....	{ M.	190, 732	21, 539	169, 193	9	.....	9	47.13	.....	53.10
	{ F.	133, 536	14, 090	119, 446	2	.....	2	14.97	.....	16.74
19. Heavily-timbered region of the Northwest.....	{ M.	594, 991	.....	594, 991	43	.....	43	72.27	.....	72.27
	{ F.	528, 428	.....	528, 428	14	.....	14	26.40	.....	26.40
20. Cordilleran region.....	{ M.	586, 445	.....	586, 445	108	.....	108	184.16	.....	184.16
	{ F.	345, 465	.....	345, 465	16	.....	16	46.31	.....	46.31
21. Pacific Coast region.....	{ M.	412, 968	150, 725	262, 243	122	69	53	295.42	457.78	202.10
	{ F.	302, 813	117, 780	185, 024	25	17	8	82.55	144.32	43.23

FIG. 87.—DEATHS FROM SUICIDE AMONG MALES, IN 21 GRAND GROUPS, PER 1,000,000 OF MALE POPULATION.



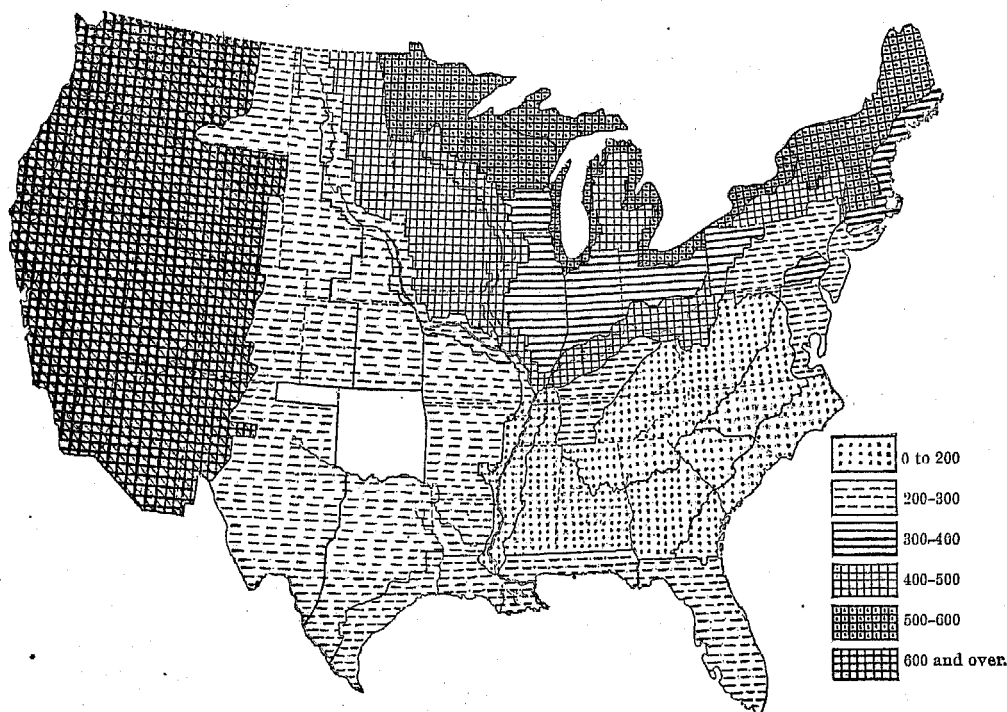
If we compare the proportion of deaths reported as due to suicide with the total number of deaths from specified causes, instead of with the living population, we find that in every 1000 deaths from known causes in the large cities, the proportions of deaths reported as due to suicide are, for males 6.2, and for females 1.8, while in the remainder of the country they are, for males 5.1, and for females 1.3.

The following table and cartogram show by grand groups the proportion of deaths reported as due to suicides in relation to the deaths from known causes:

TABLE 102.—SHOWING FOR GRAND GROUPS, WITH DISTINCTION OF SEX, THE NUMBER OF DEATHS FROM KNOWN CAUSES, THE NUMBER OF SUICIDES, AND THE PROPORTION OF DEATHS FROM THIS CAUSE IN 100,000 DEATHS FROM KNOWN CAUSES.

Grand Groups.	DEATHS FROM KNOWN CAUSES.			SUICIDES.			PER 100,000 DEATHS FROM KNOWN CAUSES.		
	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.
Total .....	719,760	372,391	347,369	2,511	2,014	497	348.86	540.82	143.07
1. North Atlantic Coast region .....	44,607	22,057	22,550	176	135	41	394.55	612.05	181.81
2. Middle Atlantic Coast region .....	87,278	45,204	42,074	251	190	61	287.58	420.31	144.98
3. South Atlantic Coast region .....	13,120	6,520	6,606	12	8	4	91.42	122.69	60.55
4. Gulf Coast region .....	15,420	8,315	7,105	36	29	7	233.46	348.70	98.52
5. Northeastern Hills and Plateaus .....	25,153	12,596	12,557	125	108	17	496.95	857.41	135.38
6. Central Appalachian region .....	31,589	16,672	14,917	92	73	19	291.24	437.87	127.37
7. Region of the Great Northern Lakes .....	42,561	22,542	20,019	241	198	43	566.24	878.36	214.79
8. The Interior Plateau .....	81,586	43,205	41,381	277	233	44	327.47	539.28	106.32
9. Southern Central Appalachian region .....	32,257	15,769	16,488	45	31	14	139.50	196.58	84.01
10. The Ohio River Belt .....	34,350	17,921	16,429	159	121	38	462.08	675.18	231.29
11. Southern Interior Plateau .....	45,099	22,730	22,369	51	39	12	110.87	171.57	51.57
12. South Mississippi River Belt .....	10,689	5,790	4,899	15	13	2	140.33	224.52	40.82
13. North Mississippi River Belt .....	28,826	15,681	13,145	120	99	21	416.29	631.33	159.75
14. Southwest Central region .....	42,662	22,135	20,527	93	74	19	217.99	334.31	92.56
15. Central region, plains and prairies .....	60,120	30,195	29,925	195	160	35	324.35	529.88	116.95
16. The Prairie region .....	71,253	37,155	34,098	254	195	59	356.47	524.82	173.03
17. Missouri River Belt .....	12,009	6,286	5,723	30	26	4	249.81	413.61	69.80
18. Region of the Western Plains .....	4,459	2,550	1,909	11	9	2	246.69	352.93	104.76
19. Heavily-timbered region of the Northwest .....	12,395	6,519	5,876	57	43	14	459.86	659.01	238.25
20. Cordilleran region .....	11,193	6,898	4,295	124	108	16	1,107.83	1,566.25	372.52
21. Pacific Coast region .....	9,228	5,051	3,577	147	122	25	1,592.07	2,158.90	698.90

FIG. 88.—DEATHS FROM SUICIDE PER 100,000 DEATHS FROM KNOWN CAUSES. IN 6 SHADES.



# CAUSES OF DEATH.

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TABLE 103.—SHOWING FOR RURAL AND CITIES, WITH DISTINCTION OF SEX, AND FOR WHITE AND COLORED, IRISH AND GERMAN PARENTAGE, THE PROPORTION OF DEATHS FROM SUICIDES IN 1000 DEATHS FROM KNOWN CAUSES.

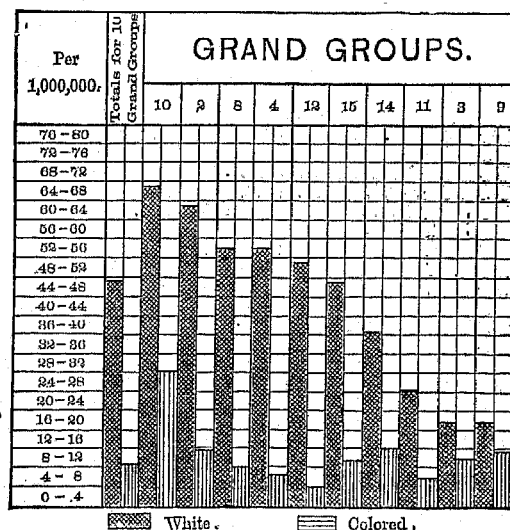
Grand Groups.	RURAL.		CITIES.		White.	Colored.	Irish parentage.	German parentage.
	Male.	Female.	Male.	Female.				
Total .....	5.1	1.8	0.2	1.8	3.2	0.5	2.7	7.2
1. North Atlantic Coast region .....	6.8	1.9	4.8	1.4			1.5	9.2
2. Middle Atlantic Coast region .....	4.9	0.7	3.8	1.7	3.2	0.5	2.0	6.3
3. South Atlantic Coast region .....	1.4	0.5		1.1	1.2	0.0		
4. Gulf Coast region .....	3.0	0.4	6.1	2.0	3.7	0.4		
5. Northeastern Hills and Plateaus .....	8.4	1.4	9.5				3.1	10.3
6. Central Appalachian region .....	4.4	1.3	3.7				1.6	7.9
7. Region of the Great Northern Lakes .....	9.0	1.7	8.5	2.5			3.4	5.0
8. The Interior Plateau .....	5.0	1.1	6.0	0.9	3.7	0.4	4.1	8.3
9. Southern Central Appalachian region .....	1.0	0.8			1.6	0.0		
10. The Ohio River Belt .....	6.0	2.0	8.7	3.2	4.9	1.3	2.4	9.3
11. Southern Interior Plateau .....	1.7	0.5			2.0	0.3		
12. South Mississippi River Belt .....	2.2	0.4			2.7	0.3		
13. North Mississippi River Belt .....	5.7	1.0	7.7	1.4			1.7	9.4
14. Southwest Central region .....	3.3	0.9			2.4	0.0		
15. Central region, plains and prairies .....	5.1	1.1	8.9	0.7	3.6	0.5		
16. The Prairie region .....	5.2	1.7					3.2	4.8
17. Missouri River Belt .....	3.8	0.5	8.4	2.0			2.5	4.4
18. Region of the Western Plains .....	3.9	1.1						7.0
19. Heavily-timbered region of the Northwest .....	6.5	2.3					5.7	7.3
20. Cordilleran region .....	15.6	3.7					17.4	28.2
21. Pacific Coast region .....	20.2	4.6	22.7	9.1			7.9	29.6

The following tables and diagrams show the relations to color and parentage of the deaths reported as due to suicide:

TABLE 104.—SHOWING FOR CERTAIN GRAND GROUPS, WITH DISTINCTION OF COLOR, THE PROPORTION OF SUICIDES IN 1,000,000 OF LIVING POPULATION.

Grand Groups.	POPULATION.		DEATHS FROM SUICIDE.		PER 1,000,000 OF LIVING POPULATION.	
	White.	Colored.	White.	Colored.	White.	Colored.
Total .....	22, 599, 253	0, 233, 115	1, 081	53	47.83	8.50
2. Middle Atlantic Coast region .....	3, 857, 593	518, 632	245	6	63.51	11.56
3. South Atlantic Coast region .....	389, 497	485, 589	7	5	17.97	10.29
4. Gulf Coast region .....	607, 839	448, 195	33	3	54.29	6.09
8. The Interior Plateau .....	4, 990, 587	724, 006	271	6	54.30	8.28
9. Southern Central Appalachian region .....	2, 264, 420	433, 538	40	5	17.69	11.53
10. The Ohio River Belt .....	2, 301, 912	138, 427	155	4	67.33	28.39
11. Southern Interior Plateau .....	1, 653, 096	1, 072, 440	41	10	24.80	5.00
12. South Mississippi River Belt .....	259, 396	450, 854	13	2	51.91	4.34
14. Southwest Central region .....	2, 291, 842	640, 834	85	8	37.08	12.48
15. Central region, plains and prairies .....	3, 992, 161	411, 501	191	4	47.84	9.72

FIG. 89.—DEATHS FROM SUICIDE IN CERTAIN GRAND GROUPS, WITH DISTINCTION OF COLOR, IN 1,000,000 OF LIVING POPULATION.





## MORTALITY AND VITAL STATISTICS.

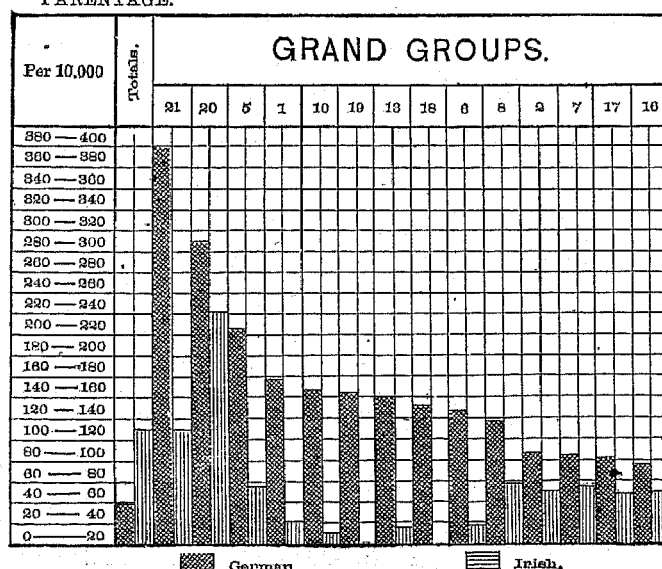
TABLE 105.—SHOWING FOR WHITE AND COLORED MALES, IN CERTAIN GRAND GROUPS, THE NUMBER OF DEATHS FROM KNOWN CAUSES, THE NUMBER OF DEATHS FROM SUICIDE, AND THE PROPORTION OF DEATHS FROM SUICIDE IN 100,000 DEATHS FROM KNOWN CAUSES.

Grand Groups.	DEATHS FROM KNOWN CAUSES.		DEATHS FROM SUICIDE.		PER 100,000 DEATHS FROM KNOWN CAUSES.	
	White males.	Colored males.	White males.	Colored males.	White males.	Colored males.
Total .....	170,155	47,629	859	39	504.83	81.88
2. Middle Atlantic Coast region .....	39,841	5,368	180	4	466.85	74.95
3. South Atlantic Coast region .....	2,773	3,747	3	5	108.18	133.44
4. Gulf Coast region .....	4,898	3,417	27	2	551.24	58.53
8. The Interior Plateau .....	36,996	6,209	228	5	616.28	80.52
9. Southern Central Appalachian region .....	12,140	3,620	29	2	238.70	55.24
10. The Ohio River Belt .....	16,446	1,475	119	2	723.58	135.59
11. Southern Interior Plateau .....	9,909	12,821	31	8	312.84	62.39
12. South Mississippi River Belt .....	2,737	3,053	11	2	401.89	65.50
14. Southwest Central region .....	17,965	4,170	68	6	378.51	143.88
15. Central region, plains and prairies .....	26,441	3,754	157	3	593.77	79.91

TABLE 106.—SHOWING FOR MALES OF GERMAN AND IRISH PARENTAGE, IN CERTAIN GRAND GROUPS, THE NUMBER OF DEATHS FROM KNOWN CAUSES, THE NUMBER OF DEATHS FROM SUICIDE, AND THE PROPORTION OF DEATHS FROM SUICIDE IN 100,000 DEATHS FROM KNOWN CAUSES.

Grand Groups.	DEATHS FROM KNOWN CAUSES.		DEATHS FROM SUICIDE.		PER 100,000 DEATHS FROM KNOWN CAUSES.	
	Irish.	German.	Irish.	German.	Irish.	German.
Total .....	24,756	22,014	98	244	395.8	1,108.3
1. North Atlantic Coast region .....	4,500	383	10	6	222.2	1,566.5
2. Middle Atlantic Coast region .....	7,780	6,205	23	54	295.6	870.2
5. Northeastern Hills and Plateaus .....	1,483	96	8	2	539.4	2,083.3
6. Central Appalachian region .....	1,620	793	3	10	184.1	1,261.0
7. Region of the Great Northern Lakes .....	1,473	3,480	8	29	543.1	833.3
8. The Interior Plateau .....	2,670	1,343	16	10	599.2	1,191.3
10. The Ohio River Belt .....	924	2,057	1	39	108.2	1,407.8
13. North Mississippi River Belt .....	680	2,000	1	28	147.0	1,400.0
16. The Prairie region .....	1,831	3,218	9	24	491.5	745.7
17. Missouri River Belt .....	219	620	1	5	456.6	806.4
18. Region of the Western Plains .....	57	76	.....	1	.....	1,315.0
19. Heavily-timbered region of the Northwest .....	312	488	.....	7	.....	1,434.4
20. Cordilleran region .....	449	208	10	6	2,227.1	2,884.6
21. Pacific Coast region .....	749	447	8	17	1,068.0	3,803.1

FIG. 90.—SUICIDES AMONG MALES OF GERMAN AND IRISH PARENTAGE, IN CERTAIN GRAND GROUPS, PER 10,000 DEATHS FROM KNOWN CAUSES AMONG MALES OF GERMAN AND IRISH PARENTAGE.



# CAUSES OF DEATH.

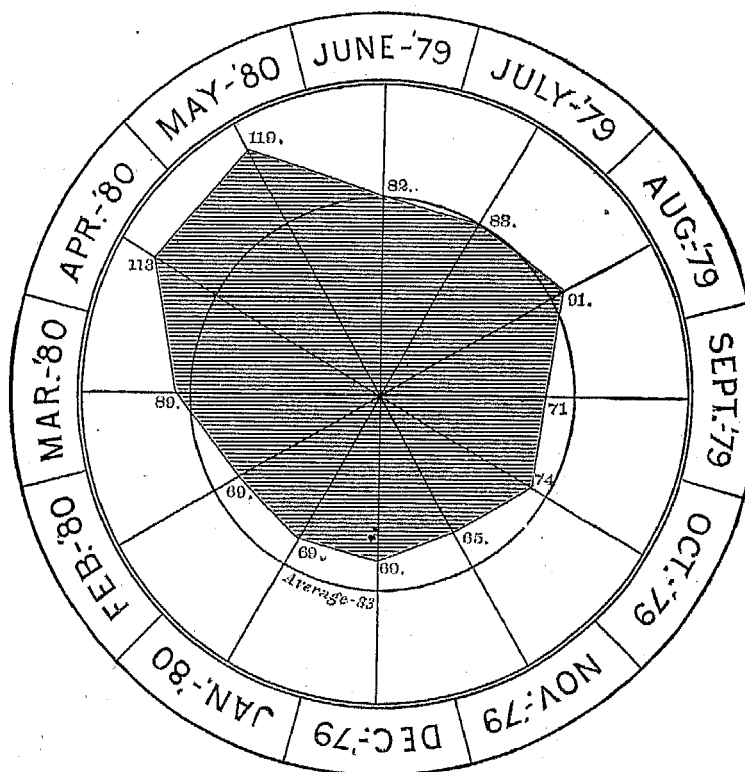
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The following table and diagram show the distribution of suicides, by months, as recorded for the whole country. This, however, would be misleading, for the reasons given above in speaking of the defects in the returns due to lapse of time:

TABLE 107.—SHOWING, WITH DISTINCTION OF SEX, THE NUMBER OF DEATHS FROM SUICIDE IN THE UNITED STATES, BY MONTHS, PER 1000 DEATHS FROM THIS CAUSE.

Months.	SUICIDES.			PER 1000 SUICIDES.		
	Total.	Males.	Females.	Total.	Males.	Females.
June, 1879.....	204	162	42	82.09	81.32	85.19
July, 1879.....	207	150	51	83.29	78.31	103.44
August, 1879.....	228	187	41	91.75	93.87	83.10
September, 1879.....	178	146	32	71.62	73.29	64.00
October, 1879.....	184	151	33	74.04	75.80	66.93
November, 1879.....	164	124	40	65.99	62.24	81.13
December, 1879.....	173	140	33	69.61	70.28	66.93
January, 1880.....	173	138	35	69.61	69.27	70.99
February, 1880.....	172	152	20	69.21	76.30	40.56
March, 1880.....	222	174	48	89.33	87.34	97.36
April, 1880.....	282	225	57	118.48	112.95	115.61
May, 1880.....	298	237	61	119.01	118.07	123.73
Month unknown.....	26	22	4			

FIG. 91.—DEATHS FROM SUICIDE IN THE UNITED STATES, BY MONTHS, PER 1000 DEATHS FROM THIS CAUSE, WITHOUT DISTINCTION OF SEX.



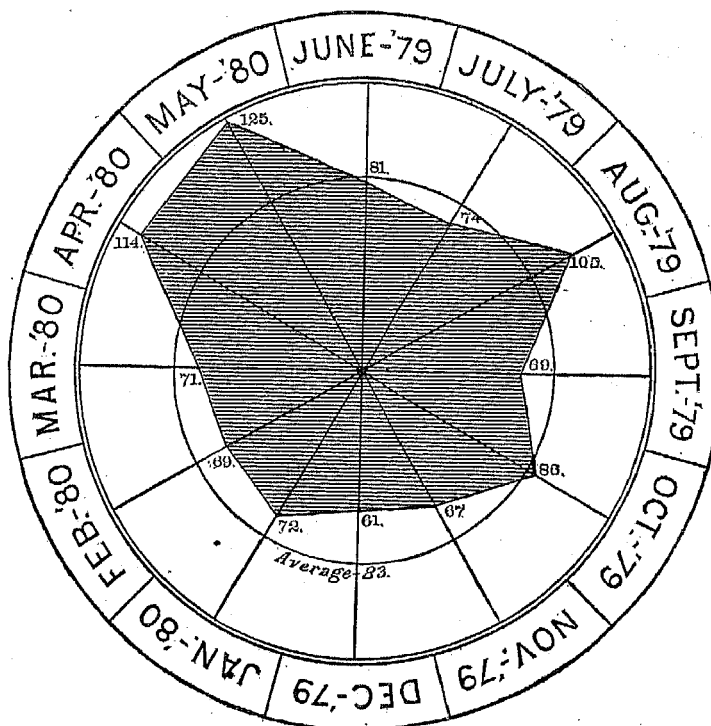
## MORTALITY AND VITAL STATISTICS.

The following table, derived from the records of the 31 cities in which the reports are made up from daily registration, is not open to the objection indicated in connection with table 107:

TABLE 108.—SHOWING THE NUMBER OF DEATHS FROM SUICIDE, WITH DISTINCTION OF MONTHS, FOR 31 REGISTRATION CITIES, AND THE PROPORTION FOR EACH MONTH TO 1000 DEATHS FROM THIS CAUSE.

31 Registration Cities.	Total.	MONTHS.											
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Total .....	604	44	42	43	69	76	40	45	64	42	52	41	37
Per 1000 .....		72.85	69.54	71.19	114.24	125.83	81.12	74.50	105.96	69.54	80.09	67.88	61.26
Baltimore, Md .....	13	1		3	2		1	2	1	1		2	
Boston, Mass .....	20	2	1	3	3	5	3	3	4			1	
Brooklyn, N. Y .....	44	4	1	8	2	9	4	2	2	3	5	6	3
Cambridge, Mass .....	3					1				2			
Camden, N. J .....	7	1	1		1	1			1	4	1		
Charleston, S. C. ....	1								1				
Chicago, Ill .....	59	6	3	5	9	5	4	2	6	6	6	3	4
Cincinnati, Ohio .....	38	4	2	5	1	3		4	8	3	4	3	1
Cleveland, Ohio .....	15		1	1	2	2	1	1	1	3	1		2
Fall River, Mass .....	6				1		1		2		1		1
Indianapolis, Ind .....	7			1			1						
Jersey City, N. J .....	3			1					2		1	1	1
Lawrence, Mass .....	3							1				1	
Louisville, Ky .....	14	1	1	1		2	2	1	1		1		
Lowell, Mass .....	3			1				1	3	1	1		1
Lynn, Mass .....	2			2						1		1	
Milwaukee, Wis .....	22	2	4	2	2		2	3	1	1	3	1	1
Nashville, Tenn .....	3		1		1			1					
Newark, N. J .....	17	3	2		1	4		1	1				
New Orleans, La .....	18		1	1	4	1		1	3	1	2	1	4
New York, N. Y .....	83		3	1	19	14	9	9	6	4	7	9	2
Paterson, N. J .....	3		1		1								
Philadelphia, Pa .....	66	6	6	3	6	13	4	3	8	1	5	3	5
Pittsburgh, Pa .....	16	2		1	1	3	3	1	1	1	2	4	1
Providence, R. I .....	3						1					1	1
Richmond, Va .....													
San Francisco, Cal .....	78	8	4	7	8	11	8	6	7	5	5	4	5
Saint Louis, Mo .....	33	3	7	2	1	2	4	1	3	1	2	3	4
Washington, D. C .....	9		2		2		1	1	1		1		1
Wilmington, Del .....													
Worcester, Mass .....	6	1	1	1	2			1					

FIG. 92.—DEATHS FROM SUICIDE, BY MONTHS, PER 1000 DEATHS FROM THIS CAUSE IN 21 REGISTRATION CITIES.



The following table gives the distribution, by months, of suicides in the United States as compared with those in the principal states of Europe; from which it will be seen that the tendency is, almost everywhere, to the occurrence of the maximum number of suicides during the months of May, June, and July:

TABLE 109.—SHOWING DISTRIBUTION, BY MONTHS, OF DEATHS FROM SUICIDE IN THE UNITED STATES IN 1880, AND IN THE PRINCIPAL STATES OF EUROPE AT DIFFERENT PERIODS. PROPORTION PER 1000 SUICIDES.

Months.	United States, 1880.	Sweden, 1871-'75.	Norway, 1866-'73.	Denmark, 1851-'56.	Ireland, 1831-'41.	Holland, 1869-'72.	Belgium, 1841-'49.	France, 1871-'76.	Prussia, 1869-'72.	Saxony, 1848-'67.	Bavaria, 1863-'75.	Württemberg, 1873-'75.	Baden, 1864-'72.	Switzerland, 1876.	Austria, 1858-'59.	Italy, 1874-'77.
Total cases .....	2,511	1,737	1,047	2,437	755	387	2,428	32,183	11,759	10,638	3,509	916	1,847	540	3,242	4,100
January .....	69.6	58	60.1	67	76	63	57	69	70.3	64	61.9	49	63	45.4	61	68
February .....	69.2	58	56.3	68	60	65	73	70	65.3	72	72.7	63	64	62.4	65	77
March .....	89.3	68	72.4	63	90	79	78	84	85.9	75	79.5	92	86	56.4	84	84
April .....	113.4	106	93.4	88	81	113	94	97	97.4	94	103.9	93	88	112.8	89	104
May .....	119.9	113	115.3	113	123	127	103	96	99.5	109	104.8	107	92	98.3	111	108
June .....	82.0	105	122.6	139	76	92	104	110	103.0	109	109.0	115	88	92.1	106	132
July .....	83.2	105	112.1	116	103	99	103	103	101.9	106	107.3	117	151	118.2	107	104
August .....	91.7	110	89.3	62	91	104	94	88	83.5	88	93.0	76	87	74.5	102	85
September .....	71.6	76	68.1	72	90	63	85	76	80.6	80	78.7	79	76	75.2	77	64
October .....	74.0	86	86.4	68	62	64	73	74	77.2	77	69.7	88	75	83.6	84	62
November .....	65.9	66	66.8	71	66	57	60	65	68.5	64	65.4	67	70	90.2	58	53
December .....	69.6	54	56.2	53	78	74	65	63	61.5	62	63.1	55	60	90.9	59	53

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The following table shows the proportion of deaths from suicides as compared with the living population at various periods in the United States and in some of the principal countries in Europe, (a) from which it would seem that in almost all countries there is upon the whole a steady increase in the proportion of deaths due to this cause:

TABLE 110.—SHOWING THE PROPORTIONAL INCREASE OF DEATHS FROM SUICIDE PER 1,000,000 OF LIVING POPULATION, IN THE UNITED STATES, AND IN CERTAIN EUROPEAN STATES, FOR THE PERIODS STATED.

Countries.	1815.	1820.	1825.	1830.	1835.	1840.	1845.	1850.	1855.	1860.	1865.	1870.	1880.
United States .....								21.1		31.5		34.8	50.0
Sweden .....	49	b 58		69	66	66	67	71	57	76	85	81	
Norway .....		b 80		97	100	107	110	107	94	85	76	(78)	
Denmark .....					213	232	258	272	276	288	277	258	
England .....				d 62.8			64?		65	66	67	66	
Ireland .....				d 10						(14)	15	18	
Prussia .....	74	83	89	96	103	110	99	130	123	122	142	134	
Hanover .....			c 83			106	109	118	131	(133)		140	
Mecklenburg .....	63					135	142		162		161	167	
Nassau .....					e 85				95	102		147	
Saxony .....					158	198	199	248	245	264	267	269	
Bavaria .....						55	f 73		g 80		90	91	
Württemberg .....						107	108		85	h 123		160	
Baden .....						68			108	109	139	156	
Belgium .....				39	46	62	60	(37)	g 55		66	68	
France .....			54	64	76	85	97	100	110	124	135	150	
Italy .....										(28)	30	35	

b 1820-'30.

c 1825-'40.

d 1830-'40.

e 1835-'45.

f 1845-'55.

g 1855-'65.

h 1860-'70.

The following tables relating to suicides in the United States army are of interest:

TABLE 111.—SHOWING FOR THE UNITED STATES ARMY, FROM 1870 TO 1884, THE NUMBER OF DEATHS FROM SUICIDE, WITH DISTINCTION OF GROUPS OF AGES AND NATIVITIES, AND THE PROPORTION PER 1000 OF CORRESPONDING AGES AND NATIVITIES.

Ages.	NATIVITIES.					PER 1000 FOR EACH GROUP OF AGES, AND FOR NATIVITIES.				
	Total.	American.	German.	Irish.	Others.	Total.	American.	German.	Irish.	Others.
Total .....	244	61	66	39	48	1,000.00	372.95	270.49	159.84	196.72
20-25 years .....	34	10	8	1	6	139.34	208.79	121.21	25.64	125.00
25-30 years .....	68	27	12	13	11	258.20	296.70	181.82	333.33	229.17
30-35 years .....	56	18	16	12	10	229.51	197.80	242.43	307.09	208.83
35-40 years .....	44	12	14	6	12	180.38	181.87	212.12	153.85	250.00
40-45 years .....	31	10	9	6	6	127.05	109.89	136.36	153.85	125.00
45-50 years .....	12	2	7	1	2	49.18	21.98	106.06	25.64	41.67
50-55 years .....	3	2			1	12.29	21.98			20.83
55-60 years .....										
60-65 years .....										
65-70 years .....	1	1				4.10	10.99			

TABLE 112.—SHOWING FOR THE UNITED STATES ARMY AND FOR CERTAIN FOREIGN ARMIES THE NUMBER OF DEATHS FROM SUICIDE AND THE PROPORTION PER 1,000,000 DEATHS FROM THIS CAUSE FOR EACH YEAR AND FOR THE WHOLE PERIOD.

Army and period.	Mean strength.	Suicides.	Per 1,000,000.	Army and period.	Mean strength.	Suicides.	Per 1,000,000.
Average for whole period .....	25,073	17	678.02	Average for whole period .....	165,011	58	351.49
United States army:				British army:			
1870-'71 .....	31,973	22	688.08	1808 .....	165,899	70	421.94
1871-'72 .....	26,595	20	752.02	1860 .....	129,714	60	462.55
1872-'73 .....	27,304	14	511.02	1870 .....	152,680	53	347.11
1873-'74 .....	28,144	15	532.97	1871 .....	154,407	68	440.39
1874-'75 .....	24,143	15	621.20	1872 .....	160,081	56	337.28
1875-'76 .....	23,683	15	633.30	1873 .....	173,051	57	329.38
1876-'77 .....	25,359	14	552.07	1874 .....	169,082	57	337.21
1877-'78 .....	22,689	13	572.96	1875 .....	172,715	45	260.54
1878-'79 .....	23,663	20	845.20	1876 .....	172,207	62	361.96
1879-'80 .....	24,468	15	613.04	1877 .....	174,396	55	315.37
1880-'81 .....	23,504	17	723.28	1878 .....	184,985	69	378.00
1881-'82 .....	23,043	23	998.13				
1882-'83 .....	23,304	16	686.57	Italy, 1860-'67 (i) .....			404.10
1883-'84 .....	23,085	25	1,082.48	Württemberg, 1873-'75 (i) .....			666.00

a MORSELLI, HENRY, *Suicide: An Essay on Comparative Moral Statistics*, p. 22. New York, 1882.

i Morselli, pp. 244 and 253.

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The nativities of the *personnel* of the United States army for the 14 years for which the suicides are recorded can not be ascertained, but an approximate estimate may be made from the statement of the nativities of the recruits accepted, according to the adjutant-general's report for the three years ending June 30, 1882. In a total of 18,377 enlistments, 12,169, or 66.21 per cent., were native Americans; 2,051, or 11.16 per cent., were Germans; 2,068, or 11.25 per cent., were Irish; and 2,089, or 11.36 per cent., were of other nationalities. Applying these percentages to the strength of the army for these three years, viz, 71,015, it would give 47,028 native Americans, 7,927 Germans, 7,991 Irish, and 8,069 of other nationalities. The suicides for the same periods were 17, or 361.48 per 1,000,000, among native Americans; 15, or 1,892.26 per 1,000,000, among the Germans; 10, or 1,251.40 per 1,000,000, among the Irish; and 13, or 1,611.10 per 1,000,000, among those of other nationalities.

The following tables indicate the relative prevalence of certain modes of suicide, from which it will be seen that suicide by shooting is the most common mode of suicide with males, but is comparatively rare among females, who resort to poison or drowning:

TABLE 113.—SHOWING THE NUMBER OF DEATHS FROM SUICIDE IN THE UNITED STATES, WITH DISTINCTION OF SEX, OF AGE, AND OF CERTAIN MODES.

Ages.	DEATHS FROM SUICIDE.		BY SHOOTING.		BY DROWNING.		BY POISON.		BY OTHER MEANS.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Total .....	2,014	497	433	39	94	60	218	117	1,209	281
5-10 years .....	2	1	1						1	1
10-15 years .....	12	4	3						9	4
15-20 years .....	89	52	26	7	2	4	8	19	53	22
20-25 years .....	180	70	65	8	7	5	13	27	95	30
25-30 years .....	189	67	56	8	3	8	20	23	110	28
30-35 years .....	192	46	49	6	9	6	32	10	102	24
35-40 years .....	209	50	56	2	10	3	30	12	113	33
40-45 years .....	188	41	41	2	6	7	25	7	114	25
45-50 years .....	188	42	30	1	12	6	24	8	122	27
50-55 years .....	195	29	35	1	11	3	22	3	127	22
55-60 years .....	169	25	28	1	11	7	7	1	123	16
60-65 years .....	141	21	12		3	5	15	2	111	14
65-70 years .....	108	15	14	1	3	3	11	2	80	9
70-75 years .....	64	21	6	1	7	1	5	3	46	16
75-80 years .....	48	4	6		3	2	4		35	2
80-85 years .....	13	3	1		2		1		9	3
85-90 years .....	4	1							4	1
90-95 years .....	3				1				2	
95 and over .....	1								1	
Unknown .....	21	5	4	1	4		1		12	4

TABLE 114.—SHOWING, WITH DISTINCTION OF SEX, OF AGE, AND OF CERTAIN MODES OF SUICIDE, THE NUMBER OF DEATHS FROM SUICIDE IN 1000 DEATHS DUE TO THIS CAUSE.

Ages.	DEATHS FROM SUICIDE.		BY SHOOTING.		BY DROWNING.		BY POISON.		BY OTHER MEANS.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
5-10 years .....	1.00	2.03	2.33						0.79	3.61
10-15 years .....	6.02	8.13	6.99						7.15	14.44
15-20 years .....	44.05	105.69	60.06	184.21	22.22	66.66	36.86	162.39	42.16	79.42
20-25 years .....	90.31	142.27	151.51	210.52	77.77	83.33	59.09	230.76	75.57	108.30
25-30 years .....	94.83	136.17	130.53	210.52	33.33	133.33	92.16	196.58	87.50	101.08
30-35 years .....	96.33	93.49	114.21	157.89	100.00	100.00	147.40	85.47	81.14	86.64
35-40 years .....	104.86	101.62	130.53	52.63	111.11	50.00	132.24	102.56	89.89	119.13
40-45 years .....	93.32	83.33	95.57	52.63	66.66	116.66	115.20	59.82	90.69	90.25
45-50 years .....	94.33	85.36	69.93	26.31	133.33	100.00	110.59	63.37	97.05	97.47
50-55 years .....	97.84	53.94	81.53	26.31	122.22	50.00	101.38	25.64	101.03	79.42
55-60 years .....	84.79	50.81	65.26	26.31	122.22	116.66	32.25	8.54	97.85	57.76
60-65 years .....	70.74	42.68	27.97		33.33	83.33	69.12	17.00	88.80	50.54
65-70 years .....	54.18	30.48	32.63	26.31	33.33	50.00	50.09	17.00	63.64	32.49
70-75 years .....	32.11	42.68	13.93	26.31	77.77	16.66	23.04	25.64	36.59	57.76
75-80 years .....	24.08	8.13	13.93		33.33	33.33	18.43		27.84	7.22
80-85 years .....	6.52	6.09	2.33		22.22		4.66		7.15	10.83
85-90 years .....	2.00	2.03							3.18	3.61
90 and over .....	2.00				11.11				2.33	



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TABLE 115.—SHOWING FOR 50 SELECTED CITIES, AND FOR EACH CITY WITH DISTINCTION OF MODES, THE NUMBER OF DEATHS FROM SUICIDE, AND THE PROPORTION IN 1,000,000 OF LIVING POPULATION.

Cities.	Population.	NUMBER OF SUICIDES.							PER 1,000,000 OF LIVING POPULATION.						
		Total.	Cutting throat.	Drowning.	Shooting.	Hanging.	Poison.	Other modes.	Total.	Cutting throat.	Drowning.	Shooting.	Hanging.	Poison.	Other modes.
50 Cities of the United States.	7,791,040	672	23	65	119	114	105	246	86.25	2.95	8.34	15.27	14.63	18.47	31.57
Albany, N. Y.	90,758	4	.....	1	1	.....	1	1	44.07	.....	11.01	11.01	.....	11.01	11.01
Allegheny, Pa.	78,082	6	.....	1	.....	2	.....	3	70.25	.....	12.70	.....	25.41	.....	88.12
Baltimore, Md.	332,313	13	.....	.....	4	5	2	2	39.11	.....	.....	12.03	15.04	6.01	6.01
Boston, Mass.	362,830	29	.....	.....	1	.....	.....	28	79.92	.....	.....	2.75	.....	.....	77.16
Brooklyn, N. Y.	566,663	44	.....	.....	.....	.....	.....	44	77.64	.....	.....	.....	.....	.....	77.64
Buffalo, N. Y.	155,134	7	.....	1	.....	1	1	4	45.12	.....	6.44	.....	6.44	6.44	25.78
Cambridge, Mass.	52,669	3	.....	.....	.....	.....	.....	3	56.95	.....	.....	.....	.....	.....	56.95
Camden, N. J.	41,650	7	.....	2	.....	.....	2	3	168.03	.....	48.00	.....	.....	48.00	72.01
Charleston, S. C.	49,984	1	.....	.....	.....	.....	.....	1	20.00	.....	.....	.....	.....	.....	20.00
Chicago, Ill.	503,185	59	.....	8	19	10	20	2	117.25	.....	15.89	37.75	10.87	80.74	3.97
Cincinnati, Ohio	255,139	37	.....	9	6	10	.....	12	145.01	.....	35.27	23.51	39.19	.....	47.03
Cleveland, Ohio	160,146	15	2	4	4	.....	5	.....	93.66	12.48	24.97	24.97	.....	31.22	.....
Columbus, Ohio	51,647	5	1	.....	1	2	.....	1	96.81	19.36	.....	19.36	38.72	.....	10.36
Dayton, Ohio	38,678	3	.....	.....	.....	.....	.....	3	77.56	.....	.....	.....	.....	.....	77.56
Denver, Colo.	85,629	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Detroit, Mich.	116,340	10	1	.....	.....	.....	6	3	85.05	8.50	.....	.....	.....	51.57	25.78
Fall River, Mass.	48,961	6	.....	.....	.....	.....	.....	6	122.54	.....	.....	.....	.....	.....	122.54
Hartford, Conn.	42,015	2	.....	.....	.....	.....	.....	2	71.40	.....	.....	.....	.....	.....	71.40
Indianapolis, Ind.	75,956	7	.....	.....	1	1	2	3	93.26	.....	.....	13.32	13.32	26.64	39.97
Jersey City, N. J.	120,722	3	.....	.....	.....	1	.....	2	24.85	.....	.....	.....	8.28	.....	16.56
Kansas City, Mo.	55,785	4	1	.....	3	.....	.....	.....	71.70	17.92	.....	53.77	.....	.....	.....
Lawrence, Mass.	39,151	3	.....	1	.....	.....	.....	2	76.62	.....	25.54	.....	.....	.....	51.08
Louisville, Ky.	123,758	14	2	2	2	3	3	2	113.12	10.16	10.16	16.16	24.24	24.24	10.16
Lowell, Mass.	59,475	3	.....	.....	.....	.....	.....	3	50.44	.....	.....	.....	.....	.....	50.44
Lynn, Mass.	33,274	2	.....	.....	.....	2	.....	.....	52.25	.....	.....	.....	52.25	.....	.....
Milwaukee, Wis.	115,587	22	1	2	5	5	1	8	190.33	8.65	17.30	48.25	43.25	8.65	69.21
Minneapolis, Minn.	46,337	4	.....	.....	.....	.....	.....	4	85.31	.....	.....	.....	.....	.....	85.31
Nashville, Tenn.	43,350	3	.....	.....	.....	.....	3	.....	69.20	.....	.....	.....	.....	69.20	.....
Newark, N. J.	136,508	17	.....	3	.....	.....	2	12	124.53	.....	21.97	.....	.....	14.65	87.09
New Haven, Conn.	62,832	1	.....	.....	.....	.....	1	.....	15.90	.....	.....	.....	.....	15.90	.....
New Orleans, La.	210,090	18	.....	3	5	4	5	1	83.20	.....	13.88	23.13	18.51	23.13	4.62
New York, N. Y.	1,206,299	83	8	5	20	14	23	13	68.80	6.63	4.14	10.57	11.00	19.06	10.77
Oakland, Cal.	34,555	8	.....	.....	6	1	1	.....	231.51	.....	.....	173.63	28.93	28.93	.....
Paterson, N. J.	51,031	3	.....	.....	.....	3	.....	.....	58.78	.....	.....	.....	58.78	.....	.....
Philadelphia, Pa.	347,170	66	7	10	15	20	11	3	77.90	8.26	11.80	17.70	28.60	12.98	3.54
Pittsburgh, Pa.	156,389	16	.....	1	11	2	1	1	102.30	.....	6.39	70.33	12.78	6.39	6.39
Providence, R. I.	104,857	3	.....	.....	.....	.....	.....	3	28.61	.....	.....	.....	.....	.....	28.61
Reading, Pa.	43,278	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Richmond, Va.	63,600	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rochester, N. Y.	39,306	6	.....	.....	.....	1	.....	5	67.13	.....	.....	.....	11.18	.....	55.94
San Francisco, Cal.	233,959	78	.....	5	4	11	4	54	333.39	.....	21.37	17.09	47.01	17.09	230.80
Scranton, Pa.	45,850	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Saint Louis, Mo.	350,518	33	.....	6	8	10	8	1	94.14	.....	17.11	22.82	28.52	22.82	2.85
Saint Paul, Minn.	41,473	2	.....	.....	.....	.....	.....	2	48.22	.....	.....	.....	.....	.....	48.22
Syracuse, N. Y.	51,792	1	.....	.....	.....	.....	.....	1	19.30	.....	.....	.....	.....	.....	19.30
Toledo, Ohio	50,137	3	.....	.....	1	.....	1	1	59.88	.....	.....	10.94	.....	10.94	10.94
Troy, N. Y.	56,747	2	.....	1	.....	1	.....	.....	35.24	.....	17.62	.....	17.62	.....	.....
Washington, D. C.	147,293	9	.....	.....	2	5	2	.....	61.10	.....	.....	13.57	33.94	13.57	.....
Wilmington, Del.	42,478	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Worcester, Mass.	58,291	6	.....	.....	.....	.....	.....	6	102.93	.....	.....	.....	.....	.....	102.93

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TABLE 116.—SHOWING FOR THE UNITED STATES AND FOR THE STATES AND TERRITORIES, WITH DISTINCTION OF MODES, THE NUMBER OF DEATHS FROM SUICIDE, AND THE PROPORTION IN 1,000,000 OF LIVING POPULATION.

States and Territories.	Population.	NUMBER OF SUICIDES.							PER 1,000,000 OF LIVING POPULATION.						
		Total.	Cutting throat.	Drowning.	Shooting.	Hanging.	Poison.	Other modes.	Total.	Cutting throat.	Drowning.	Shooting.	Hanging.	Poison.	Other modes.
The United States.....	50,155,783	2,511	127	154	472	516	835	907	50.06	2.53	3.07	9.41	10.28	6.67	18.03
Alabama.....	1,262,505	10	1	1	1	2	2	3	7.92	0.79	0.79	0.79	1.58	1.58	2.37
Arizona.....	40,440	8			4		1	3	197.82			98.91		24.72	74.18
Arkansas.....	802,525	14		1	6	2	1	4	17.44		1.24	7.47	2.49	1.24	4.93
California.....	864,094	185	4	8	34	23	21	95	213.94	4.62	9.25	39.32	26.59	24.28	109.86
Colorado.....	194,327	12			7		3	2	61.75			36.02		15.43	10.29
Connecticut.....	622,700	40			2	12	8	18	64.23			3.21	10.27	12.84	28.90
Dakota.....	135,177	7		1	2	3		1	51.78		7.39	14.79	22.10		7.39
Delaware.....	146,008	1				1			6.82				6.82		
District of Columbia.....	177,624	18			8	7	2	1	73.18			10.88	30.40	11.25	5.62
Florida.....	269,493	1						1	3.71						3.71
Georgia.....	1,542,180	28	2	4	7	1	4	10	18.15	1.20	2.50	4.53	6.64	2.59	6.48
Idaho.....	82,610	3			1	1		1	91.99			30.66	30.66		30.66
Illinois.....	3,077,871	171	8	15	35	41	33	89	55.65	2.59	4.87	11.37	18.32	10.72	12.67
Indiana.....	1,978,301	115	2	4	11	13	23	62	58.13	1.01	2.02	5.56	6.57	11.02	31.34
Iowa.....	1,624,615	78	5	2	17	22	14	18	48.01	3.07	1.23	10.46	13.54	8.61	11.07
Kansas.....	906,006	43	1	2	18	6	7	9	43.16	1.00	2.00	13.07	6.02	7.02	0.03
Kentucky.....	1,048,690	64	7	8	18	10	8	18	38.81	4.24	4.85	7.88	6.06	4.85	10.91
Louisiana.....	939,946	33		3	10	4	5	11	35.10		3.19	10.03	4.25	5.31	11.70
Maine.....	648,936	49	5	4	3	18	6	14	75.59	7.70	6.16	4.62	27.73	7.70	21.57
Maryland.....	934,943	33			8	7	4	14	35.29			8.65	7.48	4.27	14.97
Massachusetts.....	1,783,085	134	1	1	9	30	4	89	75.15	0.56	0.56	5.04	16.32	2.24	40.91
Michigan.....	1,630,937	101	8	7	15	23	21	27	61.70	4.88	4.27	9.16	14.05	12.82	16.49
Minnesota.....	780,773	49	1	4	11	10	3	20	62.75	1.28	5.12	14.08	12.30	3.84	25.61
Mississippi.....	1,131,597	15	1		2	6	1	5	13.25	0.88		1.76	5.30	0.88	4.41
Missouri.....	2,168,380	99	3	9	28	22	14	23	45.65	1.88	4.15	12.91	10.14	6.46	19.60
Montana.....	39,159	13			5	2	2	4	331.97			127.68	51.07	51.07	102.14
Nebraska.....	452,402	13		1	4	2	1	5	28.73		2.21	8.84	4.42	2.21	11.05
Nevada.....	62,206	13			4		4	5	208.78			64.24		64.24	80.30
New Hampshire.....	346,999	31	3		5	13		10	89.33	8.64		14.40	37.46		28.51
New Jersey.....	1,131,116	67		12	7	19	11	27	59.23		10.00	6.18	8.84	9.72	23.87
New Mexico.....	119,565	3			3				25.09			25.09			
New York.....	5,082,871	332	27	19	54	68	40	124	65.31	5.31	3.73	16.62	13.37	7.86	24.39
North Carolina.....	1,899,759	20	2	1	1	2	2	12	14.28	1.42	0.71	0.71	1.42	1.42	8.57
Ohio.....	3,198,062	189	14	19	34	39	19	64	59.09	4.37	5.94	19.03	12.19	5.94	20.01
Oregon.....	174,768	26	2	3	4	3	3	11	148.76	11.44	17.10	22.88	17.16	17.16	62.94
Pennsylvania.....	4,282,891	219	16	17	40	62	18	66	51.13	3.78	3.96	9.33	14.47	4.20	15.41
Rhode Island.....	276,531	10		1	1	1	4	3	36.16		3.61	3.61	3.61	14.46	10.84
South Carolina.....	995,577	16			4	1	1	10	16.07			4.01	1.00	1.00	10.04
Tennessee.....	1,542,359	39	1		7	7	10	14	25.23	0.64		4.53	4.53	6.48	9.07
Texas.....	1,591,749	65	1	3	19	3	14	25	40.83	0.62	1.88	11.98	1.88	8.79	15.70
Utah.....	143,063	4	1				2	1	27.78	6.94				18.89	6.94
Vermont.....	332,286	23	2		4	7	4	5	66.20	6.01		12.03	21.06	12.03	15.04
Virginia.....	1,512,565	22		1	6	5	3	8	15.20		0.66	3.96	3.80	1.98	5.28
Washington territory.....	75,116	9	1		4		1	3	119.81	18.81		53.25		13.81	39.03
West Virginia.....	618,457	14	2		6	4	1	1	22.63	3.23		9.70	6.46	1.61	1.61
Wisconsin.....	1,315,497	76	6	8	12	23	11	21	57.77	4.56	2.28	9.12	17.48	8.36	15.96
Wyoming.....	20,789	1			1				48.10			48.10			

## MORTALITY AND VITAL STATISTICS.

TABLE 117.—SHOWING THE NUMBER OF DEATHS FROM SUICIDE PER 1,000,000 OF LIVING POPULATION IN THE UNITED STATES, WITH DISTINCTION OF CITIES AND RURAL DISTRICTS, AND OF CERTAIN MODES OF SUICIDE.

Population of cities, 7,791,049; population of rural districts, 42,364,734.

Modes of suicide.	DEATHS FROM SUICIDE.			PER 1,000,000 OF LIVING POPULATION.		
	Total.	Cities.	Rural.	Total.	Cities.	Rural.
Total .....	2,511	672	1,839	50.06	86.25	43.40
By cutting throat.....	127	23	104	2.53	2.95	2.45
By drowning .....	154	65	89	3.07	8.34	2.12
By shooting .....	472	119	353	9.41	15.27	8.33
By hanging.....	516	114	402	10.28	14.63	9.48
By poison.....	335	105	230	6.07	13.47	5.42
Other modes .....	907	246	661	18.08	31.57	15.60

## CANCER.

To illustrate some of the various ways in which the data contained on the schedule of deaths may be arranged for the study of a single cause of death, a series of tables (Nos. XXXV-L), showing some of the relations of cancer, are given.

Cancer is a disease which is believed to have been for some years gradually increasing in frequency, and causing a larger proportion of deaths in those nations which are the most advanced in civilization. Referring to the tables above mentioned for details, I will only state here a few of the conclusions derivable from them.

The total number of deaths reported as due to cancer in the United States during the census year was 13,068, of which 4,875 were of males, and 8,193 of females. It caused 13.09 per 1,000 of the total number of deaths from known causes in males and 23.59 in females. The fallacy which vitiates attempts to compare the proportion of deaths to living population when the data are imperfect appears very strongly if we consider the statistics of this disease. Thus in the 50 large cities the proportion of deaths from cancer per 100,000 of living population was, for males 28.22 and for females 51.66; while in the remainder of the country, or in what we term the rural population, the proportion of deaths from cancer was, males 17.49 and females 29.72 per 100,000 of living population. According to these figures the mortality from cancer is much greater in the large cities than in the remaining parts of the country.

If, however, we turn to Table XV, and examine for each grand group the proportion of deaths caused by cancer in cities and in the rural districts, it will be found that the excess in the cities is much less, the figures being, for cities 19.3 and for the rural districts 17.8 per 1000 deaths from known causes, while in many regions the proportion of deaths from this cause is greater in the rural districts than it is in the large cities. For instance, on the North Atlantic coast in the rural districts it caused 22.35 in males and 40.49 in females per 1000 of all the deaths, while for cities in the same region the figures are, males 13.41 and females 31.51. In the Middle Atlantic coast the proportion of deaths of males from cancer is, in the rural districts 15.75 in the cities 12.63 per 1000 of all deaths, while for females it is, for the rural districts 25.74, for the cities 27.23 per 1000. In the northeastern hills, where cancer is most prevalent, it caused, for the rural population, 25.22 for males and 41.24 for females per 1000 of all deaths from known causes, while in the cities of Worcester and Hartford, in the same region, the proportion of deaths per 1000 was for males 11.73 and for females 24.33. On the South Atlantic coast in the rural districts it caused 6.51 in males and 15.37 in females per 1000 of all deaths from known causes, while for the city of Charleston it caused 3.58 in males and 7.83 in females, this comparatively small proportion being due to the great excess in this city of deaths of infants, especially in the colored race.

The effect of the greater completeness of the records of deaths for cities is thus very apparent, when the number of deaths is compared with the number of living population.

A certain, and by no means inconsiderable, number of the deaths from cancer reported in the cities do not originate there, but occur in persons suffering from this disease who have come in from the rural districts to the large cities to obtain the advice of some celebrated surgeon or to have the comforts of hospital attendance.

A possible cause for an undue proportion of deaths reported as due to cancer in the large cities has been suggested to me in a letter from Dr. Edward Andrews, of Chicago, as follows, viz:

That where certificates from a physician as to the cause of death are rigidly exacted, the physician who has lost a patient from any obscure abdominal disease is strongly tempted to report the cause as cancer of the stomach, which being generally recognized as an incurable disease, the loss of the patient inflicts no injury on his professional reputation.

While this might be a cause for a disproportionate number of deaths reported as due to cancer of the stomach, it would seem to be a cause which would act with almost equal force in the rural districts and in the cities. As a matter of fact, the proportion of deaths reported as due to cancer of the stomach in the large cities is less than it is

in the rural districts, as will be seen from the following tables, in which, taking four grand groups as a basis for comparison, we find that the proportion of deaths from cancer of the stomach per 1000 of all cases of cancer in which the seat is known is for the cities 247.35, while for the rural districts it is 339.25 per 1000, the proportion of deaths from cancer of the stomach to deaths from cancer of which the seat is known being for the whole United States 300.18 per 1000.

TABLE 118.—SHOWING FOR CERTAIN GRAND GROUPS, AND THE TOTAL THEREOF, WITH DISTINCTION OF CITIES AND RURAL, THE POPULATION, THE NUMBER OF DEATHS FROM CANCER OF THE STOMACH, AND THE PROPORTION IN 100,000 OF LIVING POPULATION.

Grand Groups.	POPULATION.		DEATHS FROM CANCER OF THE STOMACH.		PER 100,000 OF POPULATION.	
	Cities.	Rural.	Cities.	Rural.	Cities.	Rural.
Total .....	5,941,354	9,815,736	515	720	8.66	7.39
1. North Atlantic Coast region .....	769,108	1,847,762	60	170	7.80	0.29
2. Middle Atlantic Coast region .....	2,503,935	1,782,200	254	119	9.79	0.67
7. Region of the Great Northern Lakes .....	1,189,895	1,856,607	101	136	8.48	7.31
8. The Interior Plateau .....	1,388,410	4,326,267	100	301	7.20	0.95

TABLE 119.—SHOWING FOR CERTAIN GRAND GROUPS, AND THE TOTAL THEREOF, WITH DISTINCTION OF CITIES AND RURAL, THE NUMBER OF DEATHS FROM CANCER OF WHICH THE SEAT IS KNOWN, THE DEATHS FROM CANCER OF THE STOMACH, AND THE PROPORTION IN 1000 DEATHS FROM CANCER OF WHICH THE SEAT IS KNOWN.

Grand Groups.	DEATHS FROM CANCER WITH KNOWN SEAT.		DEATHS FROM CANCER OF THE STOMACH.		PER 1000 DEATHS FROM CANCER OF WHICH THE SEAT IS KNOWN.	
	Cities.	Rural.	Cities.	Rural.	Cities.	Rural.
Total .....	2,082	2,140	515	720	247.35	339.25
1. North Atlantic Coast region .....	261	497	60	170	229.88	342.65
2. Middle Atlantic Coast region .....	1,123	373	254	119	226.17	319.63
7. Region of the Great Northern Lakes .....	280	363	101	136	360.71	374.65
8. The Interior Plateau .....	418	907	100	301	239.23	331.89

On the other hand, if we rely on the proportion of deaths from cancer as compared with deaths from all known causes in comparing urban with rural mortality, it indicates too low a proportion of deaths in the cities, owing to the great number of deaths of infants, in whom cancer is not frequent. The best way to avoid this source of error with the data at our command is to make separate comparisons for the deaths under 5 years, and also for certain other groups of ages. Thus we find, from table 124, that of 1,000,000 deaths from known causes, the number of deaths reported as due to cancer is, in the large cities, for those dying under 5 years of age, males 602, females 702, while in the rural districts for the same age it is, males 915, females 1,135. Between the ages of 15 and 65 the proportion in cities is, males 24,223, females 56,939, while in the rural districts it is, males 19,754, females 37,812, and for all deaths over 65 years of age the proportions are, in cities, males 35,097, females 46,096, and in the rural districts, males 34,608, females 46,220.

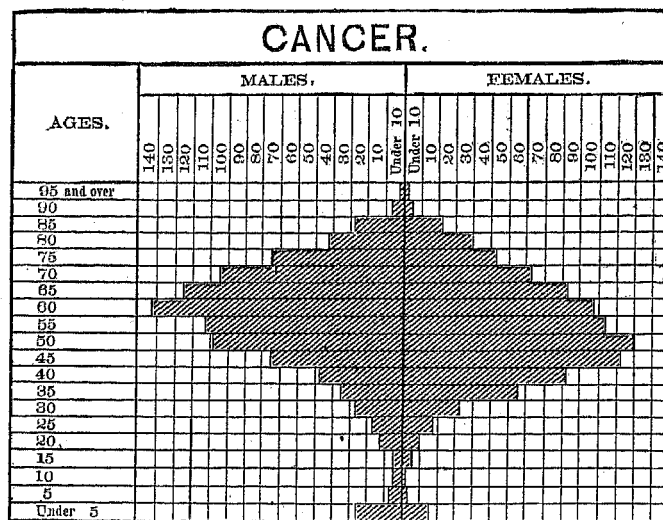
Cancer is a disease which affects all ages, but in very unequal proportions. Thus, out of the 8,193 cases reported as occurring in females, the proportion of deaths occurring under 5 years of age was 15.95 per 1000; from 5 to 10, 2.82 per 1000; from 10 to 15, 1.60 per 1000; and from this period the proportion gradually rises in each quinquennium, until between the ages of 50 and 55 it reaches 130.18 per 1000, and thence again gradually diminishes.

TABLE 120.—SHOWING THE NUMBER OF DEATHS FROM CANCER AT EACH GROUP OF AGES IN 1000 DEATHS REPORTED AS CAUSED BY THIS DISEASE.

Ages.	Males.	Females.	Ages.	Males.	Females.	Ages.	Males.	Females.
Under 1 year .....	12.80	6.50	15-20 years .....	5.88	5.64	60-65 years .....	141.03	108.59
1 year .....	3.51	2.58	20-25 years .....	11.56	10.31	65-70 years .....	124.30	95.34
2 years .....	2.48	2.70	25-30 years .....	14.04	18.16	70-75 years .....	100.31	73.10
3 years .....	3.30	2.21	30-35 years .....	26.84	34.85	75-80 years .....	75.57	55.31
4 years .....	3.72	1.06	35-40 years .....	35.10	67.36	80-85 years .....	43.98	30.93
Total under 5 years ..	25.81	15.95	40-45 years .....	48.32	94.48	85-90 years .....	19.20	11.29
5-10 years .....	7.23	2.82	45-50 years .....	70.61	122.82	90-95 years .....	5.78	4.23
10-15 years .....	5.99	1.60	50-55 years .....	109.02	180.18	95 and over .....	1.24	1.96
			55-60 years .....	113.15	114.97	Unknown .....	6.61	5.28

## MORTALITY AND VITAL STATISTICS.

FIG. 93.—DEATHS FROM CANCER AT CERTAIN GROUPS OF AGES IN 1000 DEATHS CAUSED BY THIS DISEASE.



These proportions, however, do not accurately represent the increasing proportion of deaths from cancer with advancing age. To show this, it is necessary to show for each group of ages the proportion of deaths from cancer occurring in living persons of that age. This we can not do with accuracy, owing to the character of the data; but the following table and diagrams indicate that the mortality from cancer rapidly increases with advancing years to the age of 90. The proportion of deaths from cancer is higher for the first five years of life than it is during the next twenty years.

TABLE 121.—SHOWING FOR THE TOTAL POPULATION AND FOR THE FOREIGN-BORN IN THE UNITED STATES, WITH DISTINCTION OF SEX AND AGE, THE NUMBER OF DEATHS FROM CANCER OF PERSONS OVER 20 YEARS OF AGE IN 100,000 OF POPULATION OF CORRESPONDING AGES.

Ages.	DEATHS FROM CANCER IN THE UNITED STATES IN 100,000 OF POPULATION.			DEATHS OF FOREIGN-BORN FROM CANCER IN 100,000 OF CORRESPONDING POPULATION.		
	Total.	Males.	Females.	Total.	Males.	Females.
All over 20 years....	48.2	34.5	62.5	61.4	49.5	75.6
20-25 years.....	2.7	2.1	3.3	4.3	4.0	4.7
25-30 years.....	5.2	3.2	7.5	7.1	4.6	10.1
30-35 years.....	12.2	7.4	17.4	14.2	10.0	19.5
35-40 years.....	23.9	11.1	37.2	24.3	13.3	37.6
40-45 years.....	40.6	18.8	62.8	43.8	27.7	62.8
45-50 years.....	65.6	34.3	90.0	75.9	50.4	105.8
50-55 years.....	86.3	54.6	121.5	98.4	72.9	129.7
55-60 years.....	116.7	81.1	167.0	136.3	115.0	162.5
60-65 years.....	142.0	110.7	170.4	141.0	125.8	159.7
65-70 years.....	189.0	158.6	224.3	185.2	184.6	186.0
70-75 years.....	224.2	205.9	242.8	217.2	214.8	219.9
75-80 years.....	290.6	264.0	316.5	266.9	282.9	250.0
80-85 years.....	317.7	313.5	321.3	270.6	266.0	257.3
85-90 years.....	371.2	424.5	320.4	231.2	226.2	235.4
90-95 years.....	391.3	440.6	359.0	168.9	314.9	59.1
95 and over.....	250.5	183.8	290.1	72.9	.....	127.8

FIG. 94.—DEATHS FROM CANCER OF PERSONS OVER 20 YEARS OF AGE, WITH DISTINCTION OF AGE AND SEX, IN 100,000 OF POPULATION OF CORRESPONDING AGES.

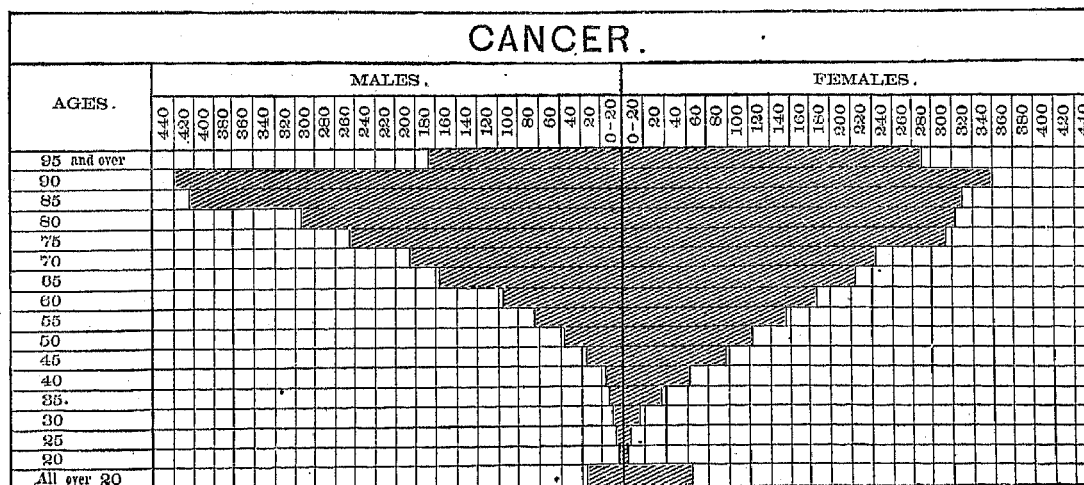
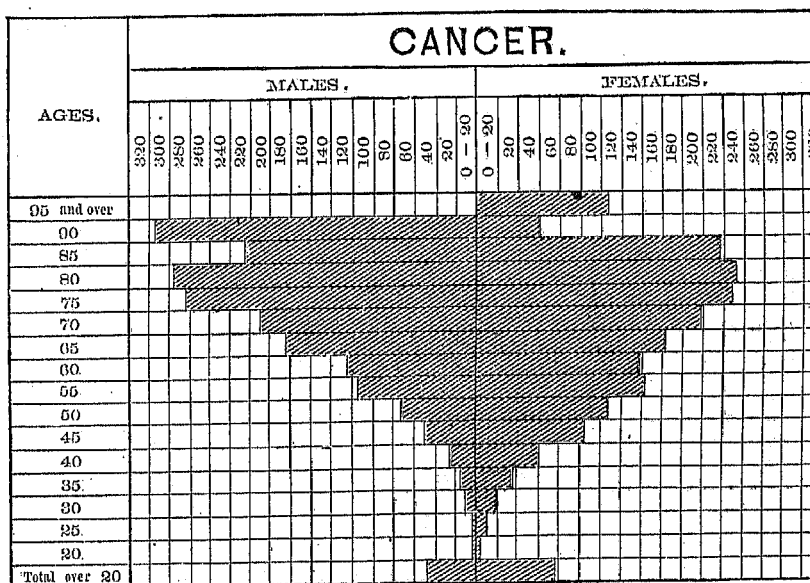


FIG. 95.—DEATHS FROM CANCER OF FOREIGN-BORN PERSONS OVER 20 YEARS OF AGE, WITH DISTINCTION OF AGE AND SEX, IN 100,000 OF POPULATION OF CORRESPONDING AGES.



As we can not usefully compute from the census data the mortality from cancer at each age in relation to the number of the living population of corresponding ages for different regions or localities, the best that we can do toward determining either the influence of age distribution upon the apparent relations of cancer and locality, or the influence of locality in causing the increase or decrease of cancer at certain ages, is to determine for different regions the proportion of deaths from cancer at each age to the whole number dying of cancer. The results of such computations are shown in Table XXXIX, in this volume.

From this it appears that the greatest number of deaths from cancer in white males born in the United States occurred between the ages of 60 and 70, and in white females between the ages of 50 and 60; in white males born in Ireland the decade giving the greatest number of deaths is from 45 to 55, and, for females born in Ireland, from 50 to 60; among those born in Germany the decade of the greatest number of deaths is, for males, from 50 to 60, and for females, from 45 to 55.

In the 10 grand groups, Table XXXVII, in which the proportion of colored population is largest, the decades giving the greatest number of deaths from cancer are, for white males, 55 to 65; females, 45 to 55 years; and for the colored males, 55 to 65; colored females, 45 to 55 years.

From these figures it would seem that, in the same localities, there is little difference as regards race in the age in which cancer is most prevalent.

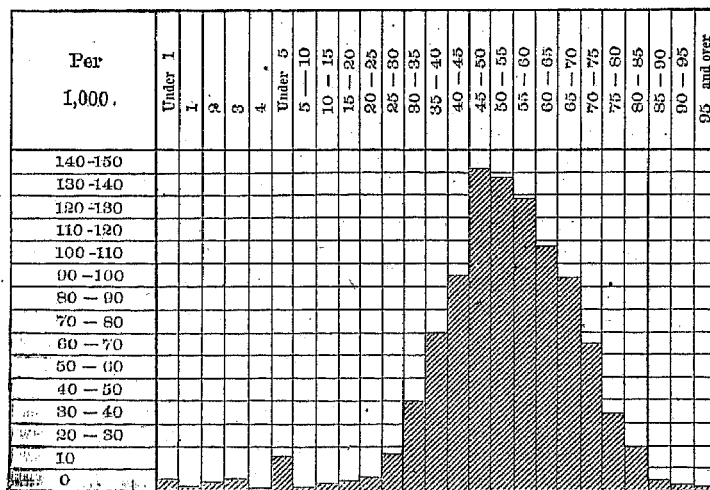
The following table and diagram show for the 31 registration cities, whose returns are specially accurate, for each group of ages the number of deaths reported from cancer; and also for the sum of these the proportion per 1000 at each group of ages to the total deaths from cancer of which the ages are known:



TABLE 122.—SHOWING FOR 31 REGISTRATION CITIES, FOR EACH GROUP OF AGES, THE NUMBER OF DEATHS FROM CANCER, AND THE PROPORTION IN 1000 TO TOTAL NUMBER OF DEATHS FROM CANCER OF WHICH THE AGES ARE KNOWN.

Cities.	Total.	Under 1.	1.	2.	3.	4.	Total under 5.	5-10.	10-15.	15-20.	20-25.	25-30.	30-35.	35-40.	40-45.	45-50.	50-55.	55-60.	60-65.	65-70.	70-75.	75-80.	80-85.	85-90.	90-95.	95 and over.	Unknown.
Total.....	2,835	18	5	8	9	5	45	4	6	13	24	40	114	203	274	400	393	366	306	271	182	97	59	15	5	2	10
Baltimore, Md.....	172		1				1				4	2	4	11	14	28	21	24	25	15	12	8	5	1	1	1	
Boston, Mass.....	188	2					2				2	4	4	15	13	30	29	18	14	21	17	6	7				
Brooklyn, N. Y.....	214								1	2		3	7	9	26	20	34	24	23	25	16	5	7	2	1		
Cambridge, Mass.....	24												1	3	1	2	5	1	1	6	2	2					
Camden, N. J.....	22		1				1							1	3	2	4	1	5		2	1	1	1			
Charleston, S. C.....	10									2	1					2	1		1	1	1	1					
Chicago, Ill.....	168	1	1	1		1	4			1	3	2	7	10	24	31	18	21	14	16	11	3	2	1			
Cincinnati, Ohio.....	90			1		1	2					2	3	10	10	8	14	19	11	7	6	6	1				
Cleveland, Ohio.....	45			1			1				1			5	5	5	7	3	4	7	4	1		2			
Fall River, Mass.....	15													3	1	3	1	1	2	2			1	1			
Indianapolis, Ind.....	14											1	1	1	1	4	1	2	2		1						
Jersey City, N. J.....	35												2	3	4	7	4	3	3	4	5						
Lawrence, Mass.....	6															3		1	1	1							
Louisville, Ky.....	30	1					1		1					7	3	7	3	2	5	3	3	1	1		1		1
Lowell, Mass.....	21												1	1		3	2	3	2	3	5	1					
Lynn, Mass.....	13												1	1		4	1	2	2	2							
Milwaukee, Wis.....	46	1			1		2		1			1	3		6	5	5	11	7	2	1	2					
Nashville, Tenn.....	8													1	1		1	3	1		1						
Newark, N. J.....	62											1	1	3		12	7	11	4	10	7	5		1			
New York, N. Y.....	641	7	1	4	7	2	21	3	2	3	6	13	34	46	61	74	95	93	66	57	33	16	14	3	1		
New Orleans, La.....	132	2	1				3	1			1	3	7	8	10	20	14	22	15	13	3	8	4				
Paterson, N. J.....	20														3	5	1	4	2	1	1	2	1				
Philadelphia, Pa.....	384	1			1	1	3		1	2	4	6	10	25	48	51	51	37	36	24	10	10	2		1	9	
Pittsburgh, Pa.....	42									2					2	5	7	5	3	9	8	4	2				
Providence, R. I.....	71											2	5	4	5	6	9	8	10	10	7	3	1		1		
Richmond, Va.....	20	1					1							1	1	3	4	4	2	3	1						
San Francisco, Cal.....	128											3	10	17	14	21	20	13	16	7	3	4					
Saint Louis, Mo.....	114	1	1				2					1	8	10	9	15	21	11	16	10	7	4					
Washington, D. C.....	54	1					1			1	1	2	4	2	5	8	7	4	6	4	3	4	2				
Wilmington, Del.....	8										1			1	1		3	2									
Worcester, Mass.....	20													3	1	1	3	3	1	2	2	1	2	1			
Per 1000 of known ages.....		6.37	1.76	2.83	3.18	1.70	15.92	1.41	2.12	4.60	8.49	16.28	40.35	71.85	96.99	141.50	139.11	129.55	108.31	95.92	64.42	34.33	20.88	5.80	1.70	0.70	

FIG. 96.—DEATHS FROM CANCER IN 31 REGISTRATION CITIES, AT CERTAIN GROUPS OF AGES, IN 1000 DEATHS FROM CANCER OF WHICH THE AGES ARE KNOWN.



The fact that the mortality from cancer steadily increases from the age of 15 to that of 85 or thereabout, is well shown by the following table, taken from the registrar general's returns of England and Wales, showing for two periods of 10 years each, with distinction of age, the number of deaths from cancer, and the proportion per 100,000 deaths from cancer at each period of age:

TABLE 123.—SHOWING FOR ENGLAND AND WALES, FOR THE DECENNIAL PERIODS 1851-'60 AND 1861-'70, WITH DISTINCTION OF AGES, THE MEAN POPULATION, THE NUMBER OF DEATHS FROM CANCER, AND THE PROPORTION IN 100,000 DEATHS FROM CANCER BY AGES TO TOTAL POPULATION OF CORRESPONDING AGES.

Ages.	1851-'60.			1861-'70.		
	Mean population.	Deaths from cancer.	Proportion per 100,000.	Mean population.	Deaths from cancer.	Proportion per 100,000.
Under 1 year.....	.....	178	.....	640,306	37	5.77
1 year.....	.....	92	.....	568,516	40	8.61
2 years.....	.....	124	.....	575,071	84	14.60
3 years.....	.....	97	.....	556,306	120	21.57
4 years.....	.....	68	.....	545,830	87	15.93
Under 5 years	2,524,441	559	22.14	2,886,029	377	13.06
5-10 years...	2,218,573	209	9.42	2,525,206	190	7.52
10-15 years...	2,008,918	172	8.56	2,264,708	176	7.77
15-20 years...	1,844,916	317	17.18	2,056,527	378	18.37
20-25 years...	1,748,050	496	28.37	1,917,126	576	30.04
25-35 years...	2,851,271	2,050	103.46	3,148,257	3,609	114.63
35-45 years...	2,207,924	8,586	388.87	2,464,912	11,040	447.88
45-55 years...	1,022,597	13,958	860.22	1,807,406	19,691	1,054.36
55-65 years...	1,088,920	15,350	1,409.05	1,255,540	22,206	1,775.79
65-75 years...	617,704	12,109	1,900.03	711,564	16,918	2,377.57
75-85 years...	230,121	4,788	2,080.04	266,002	6,655	2,598.97
85 and over...	83,395	702	2,102.11	35,640	914	2,563.94

Another method of showing the influence of age on the development of cancer is by computing the proportion of deaths which it causes in relation to all known causes of death at certain groups of ages. This is shown by the following table:

TABLE 124.—SHOWING FOR CERTAIN GROUPS OF AGES THE NUMBER OF DEATHS FROM CANCER, AND THE PROPORTION OF DEATHS FROM THIS CAUSE PER 1,000,000 DEATHS AT THE CORRESPONDING AGE GROUPS, WITH DISTINCTION OF SEX, OF RURAL AND CITIES, AND FOR CERTAIN REGIONS, OF COLOR AND PARENTAGE.

Deaths from cancer in—		DEATHS.				PROPORTION IN 1,000,000 DEATHS AT CERTAIN AGES.			
		Under 5.	5-15.	15-65.	65 and over.	Under 5.	5-15.	15-65.	65 and over.
The United States .....	{ M.	125	64	2,831	1,828	831	2,006	20,800	34,680
	{ F.	130	36	5,795	2,219	1,019	1,116	41,694	46,196
Rural .....	{ M.	101	50	2,059	1,551	915	2,092	19,754	34,608
	{ F.	106	32	4,167	1,804	1,135	1,176	37,812	40,220
Cities .....	{ M.	24	8	772	272	602	1,558	24,223	35,097
	{ F.	24	4	1,598	415	702	793	59,930	40,006
White in 10 Grand Groups .....	{ M.	54	28	1,846	880	788	2,012	21,282	36,058
	{ F.	66	18	2,810	1,081	1,130	1,417	43,196	40,900
Colored in 10 Grand Groups .....	{ M.	14	13	115	36	617	2,882	7,158	8,569
	{ F.	11	2	461	132	550	399	23,519	32,016
Irish parentage in 14 Grand Groups .....	{ M.	4	8	290	155	611	5,148	23,032	38,433
	{ F.	5	2	545	142	906	1,393	47,019	30,345
German parentage in 14 Grand Groups .....	{ M.	7	3	341	184	808	1,744	36,035	44,578
	{ F.	6	2	418	118	923	1,228	58,924	48,229

From this table it will be seen that in each 1,000,000 deaths from known causes occurring under 5 years of age in males, cancer caused 831 deaths; from 5 to 15 years of age, 2,006; from 15 to 65 years of age, 20,800, and over 65 years of age, 34,680. In females the progressive increase in the proportion of deaths from cancer with advancing age is also well marked, the figures being—under 5 years of age, 1,019; from 5 to 15, 1,116; from 15 to 65, 41,694; and over 65, 46,196.

Exceptions to this rule for the age group 65 and over appear in the deaths of females in cities and females of Irish and German parentage.

The great excess of deaths from cancer in females is not marked until after the age of 20, and is less marked after the age of 65.

The increase of mortality from cancer with advancing age may be explained either on the theory that the cause of cancer becomes more potential in advanced age, at the period of physiological decay, or on the theory that the predisposition to cancer belongs to the strongest and longest lived. If, for instance, we take Cohnheim's theory of the development of cancer from embryonic tissue, we might either suppose that in old age there is a sort of reversion of type, and that this tissue is either developed anew or increases, or we may take the hypothesis that those in whom this tissue persists are the strongest to resist death and most likely to reach old age.

# MORTALITY AND VITAL STATISTICS.

The reported number of deaths from cancer, and the ratios derived from these in connection with the living population, is undoubtedly too small, if we use the term "cancer" in the ordinary sense, for there is very little doubt that most of the deaths reported as due to tumor, viz, 1,781, might properly have been classed with cancer. As, however, for reasons fully set forth in the introduction, the ratios of deaths in relation to population, as indicated by the census, are not of much value, the chief interest being in the relations between the total number of deaths reported in any given locality, or at any given age, or from any given cause, to each other, it has been thought best to confine these tabulations to the deaths actually reported as due to cancer.

The relations of race to the tendency to death from cancer are important and interesting, as will appear from an examination of the following tables and diagrams, showing, per 100,000 of living population, the proportion of deaths from cancer in white males to colored males, and white females to colored females, respectively, in those grand groups containing the principal part of the colored population. From this it will be seen that in males the proportion of deaths per 100,000 of living population is, for the whites 20.54, and for the colored 5.85; in the females the proportions are, for the whites 35.44, and for the colored 19.32:

TABLE 125.—SHOWING IN CERTAIN GRAND GROUPS, FOR MALE AND FEMALE POPULATION, WITH DISTINCTION OF COLOR, THE NUMBER OF DEATHS FROM CANCER IN 100,000 OF LIVING POPULATION.

Grand Groups.	MALE POPULATION.		DEATHS FROM CANCER.		PER 100,000 OF LIVING POPULATION.		FEMALE POPULATION.		DEATHS FROM CANCER.		PER 100,000 OF LIVING POPULATION.	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
Total .....	11,340,867	3,076,614	2,330	180	20.54	5.85	11,258,446	3,156,501	3,991	610	35.44	19.32
2. Middle Atlantic Coast region .....	1,890,114	251,223	530	32	30.54	12.73	1,958,389	267,400	1,043	84	53.25	31.41
3. South Atlantic Coast region .....	193,705	236,916	26	14	13.42	5.90	195,792	248,043	68	31	34.72	12.46
4. Gulf Coast region .....	307,786	220,661	67	17	21.76	7.70	300,053	227,594	114	50	37.90	21.96
8. The Interior Plateau .....	2,466,076	351,712	682	28	27.64	7.89	2,523,911	369,384	1,137	84	45.04	22.74
9. Southern Central Appalachian region .....	1,127,421	214,064	150	14	13.30	6.52	1,136,090	218,844	321	48	28.23	21.93
10. The Ohio River Belt .....	1,158,590	68,743	225	13	19.42	18.91	1,143,322	69,684	355	19	31.05	27.26
11. Southern Interior Plateau .....	830,079	974,229	120	37	14.61	3.79	832,117	998,220	212	159	25.47	15.93
12. South Mississippi River Belt .....	131,530	232,143	7	9	5.32	3.87	118,866	227,711	25	31	21.03	13.61
14. Southwest Central region .....	1,203,964	319,997	108	6	8.97	1.87	1,087,678	320,837	156	47	14.34	14.64
15. Central region, plains and prairies .....	2,031,042	203,326	365	10	17.97	4.91	1,961,119	208,175	560	57	28.55	27.38

FIG. 97.—DEATHS FROM CANCER AMONG FEMALES IN CERTAIN GRAND GROUPS, WITH DISTINCTION OF WHITE AND COLORED, IN 100,000 OF LIVING FEMALE POPULATION.

